



Raised 'pork chop' pedestrian refuge island/ right-turn slip lane

Definition

Pork chop islands are triangular raised islands placed between a right-turn slip lane and through-travel lanes. They channelize vehicular traffic and provide a refuge for pedestrians crossing a roadway, where they can wait for a suitable gap in traffic or for the WALK phase of a pedestrian signal. Current best practice and recommended design for curb radius consists of a two-center compound curve design.

Objective

To channelize right-turning vehicles in a manner that keeps turning speeds low, allows for good sightlines for pedestrians and for drivers of turning vehicles, and minimizes exposed crossing distance for pedestrians.

Advantage

Balances need for larger turning radii with pedestrian safety and mobility goals.

Allows pedestrians to focus on crossing one portion of a roadway at a time.

Divides crossing distance into shorter lengths and provides a safe place for pedestrians to stand when they do not have sufficient time to complete a crossing.

Improves visibility and sightlines for pedestrians and for drivers.

Improves signal timing and overall operations for intersection.

Challenge

Added obstruction in roadway; can be an obstacle to snow plowing and removal.

Visually impaired pedestrians may be unaware of the presence of refuge islands and find the accessible pedestrian way difficult to follow.

May require additional ROW.

Subsequent slip lanes, unless properly designed, may create turning radii that encourage drivers to speed around corners.

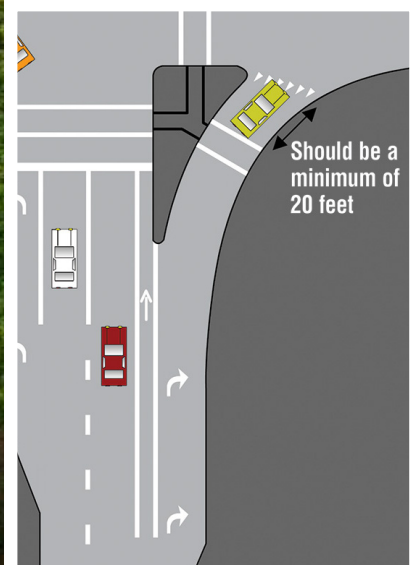
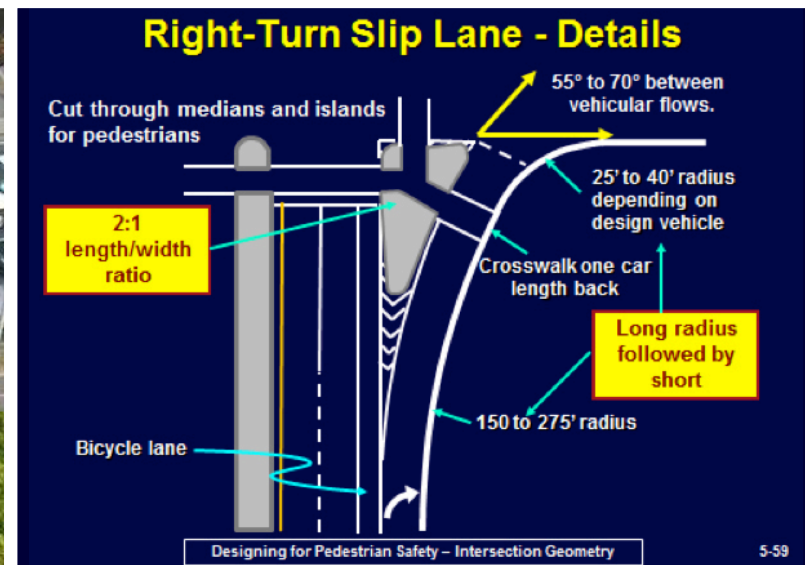
Resources

NCHRP Report 674: Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_674.pdf.

PedSafe Countermeasures: Improved Right-Turn Slip-Lane Design http://www.walkinginfo.org/pedsafe/pedsafe_curb1.cfm?CM_NUM=15.

Pedestrian and Bicycle Information Center, Crosswalks <http://www.walkinginfo.org/engineering/crossings-crosswalks.cfm>.

FHWA Proven Safety Countermeasures: Medians and Crossing Islands http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_011.htm.



Images (clockwise from main image):

Example of a "pork chop" pedestrian refuge island.
Source: Dan Burden.

Additional examples:
Sources: Federal Highway Administration (FHWA), Designing for Pedestrian Safety; FHWA, Designing for Pedestrian Safety; FHWA, Designing Road for an Aging Population; FHWA, Designing for Pedestrian Safety.