

APPENDIX K

FLOW CHARTS ILLUSTRATING DECISION RULES

Decision Rules for the Expert System

This document contains flow charts describing the decision rules for the expert system for recommending speed limits in speed zones that was developed as a part of NCHRP Project 3-67.

Terms:

Closest 85th

This is the 5 mph increment that is closest to the 85th percentile speed (e.g., if the 85th percentile speed is 63 mph, the Closest_85th will be 65 mph)

Rounded-down 85th

This is the 5 mph increment obtained by rounding down the 85th percentile to the nearest 5 mph increment (e.g., if the 85th percentile speed is 63 mph, the Rounded-down_85th will be 60 mph)

Closest 50th

This is the 5 mph increment that is closest to the 50th percentile speed (e.g., if the 50th percentile speed is 58 mph, the Closest_50th will be 60 mph)

SL_1

Speed limit calculated using safety surrogates

SL_2

Speed limit calculated using crash data from the crash module

SL

Recommended speed limit

L.A.F.

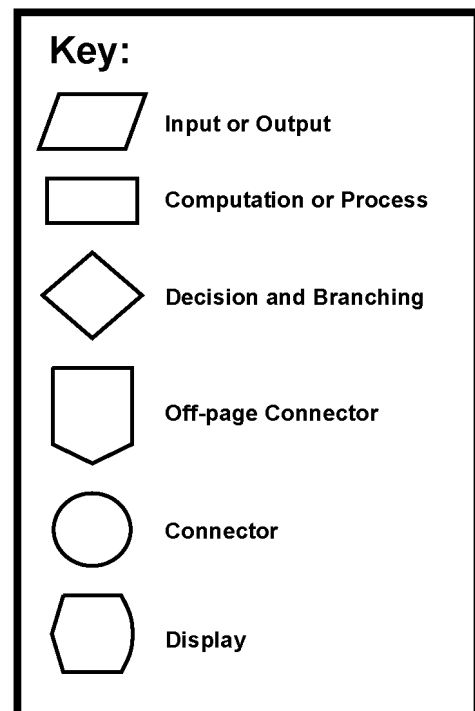
Limited Access Freeway

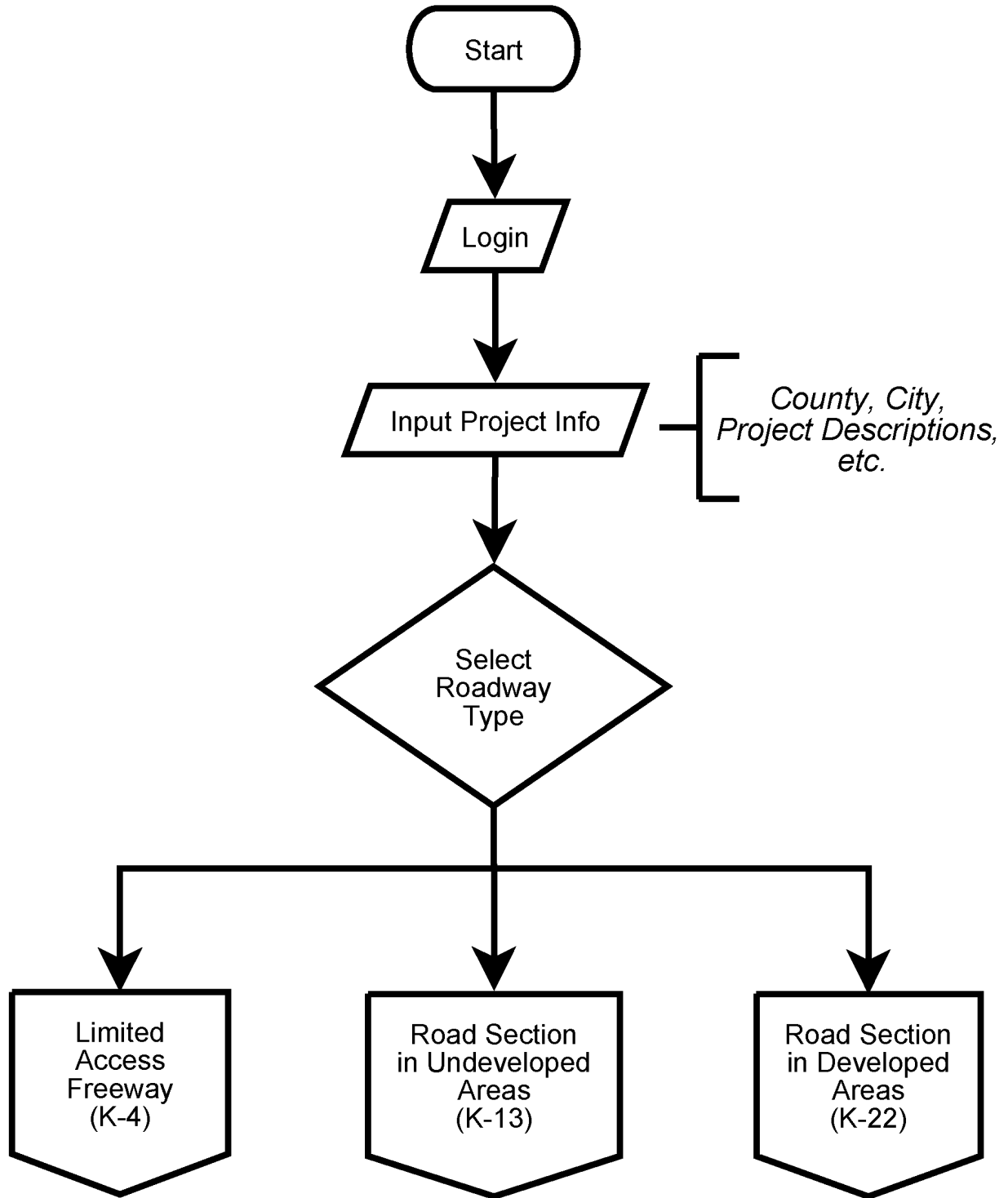
R.S.I.U.A.

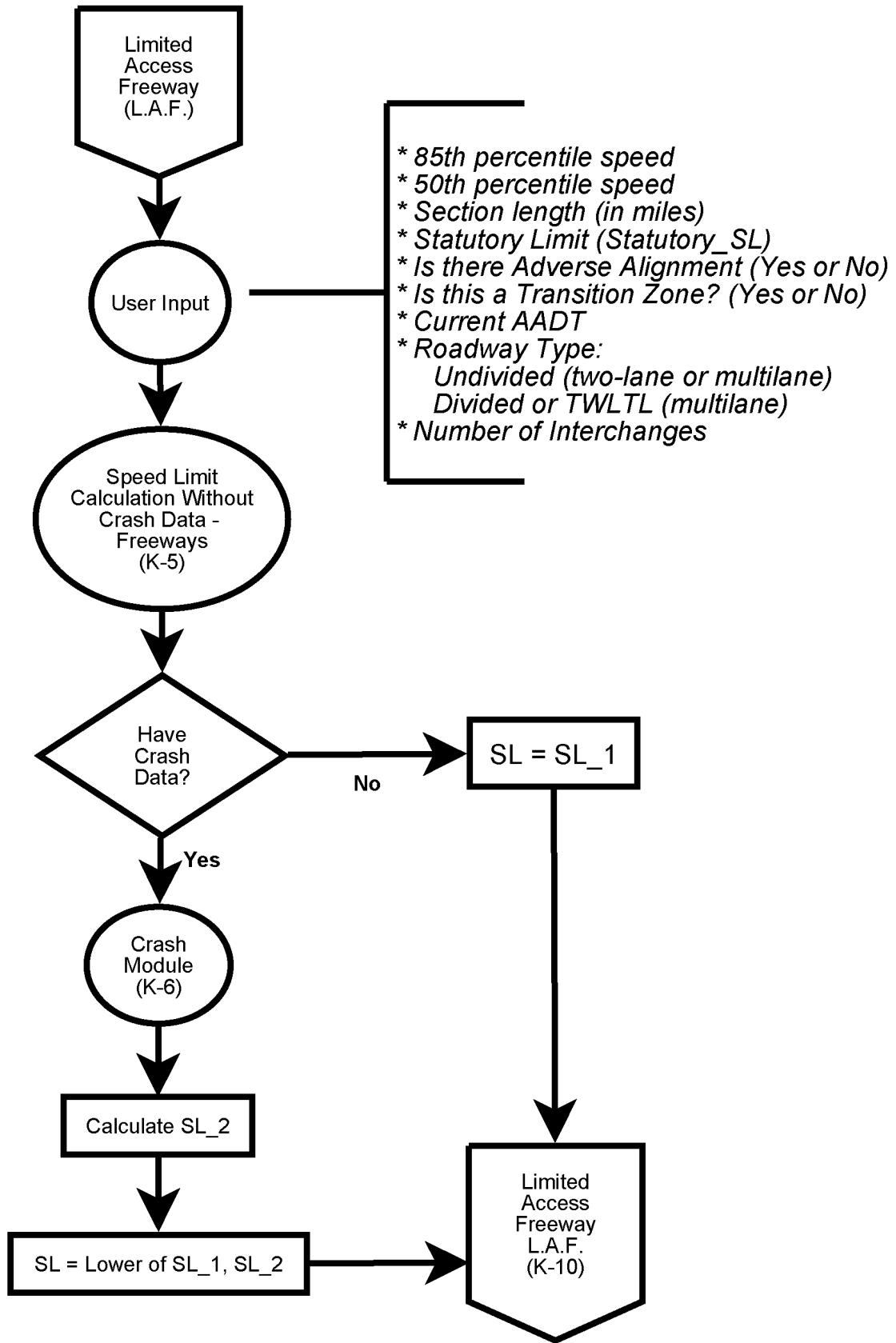
Road Sections in Undeveloped Areas

R.S.I.D.A.

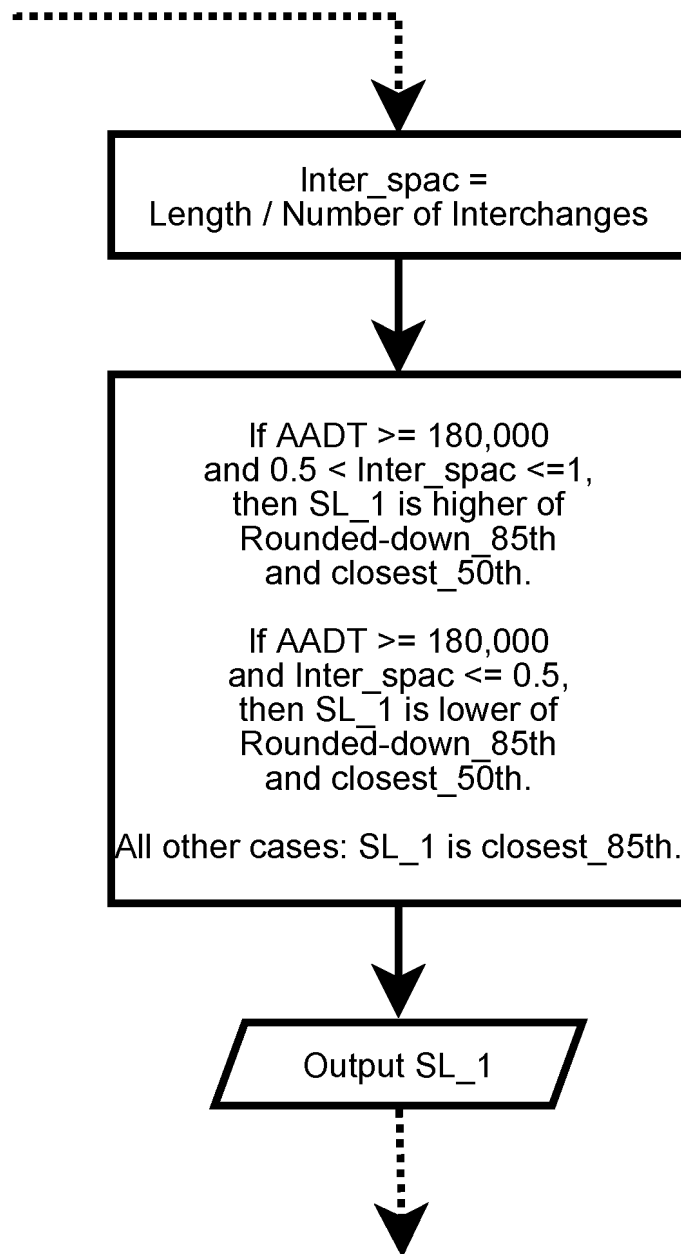
Road Sections in Developed Areas



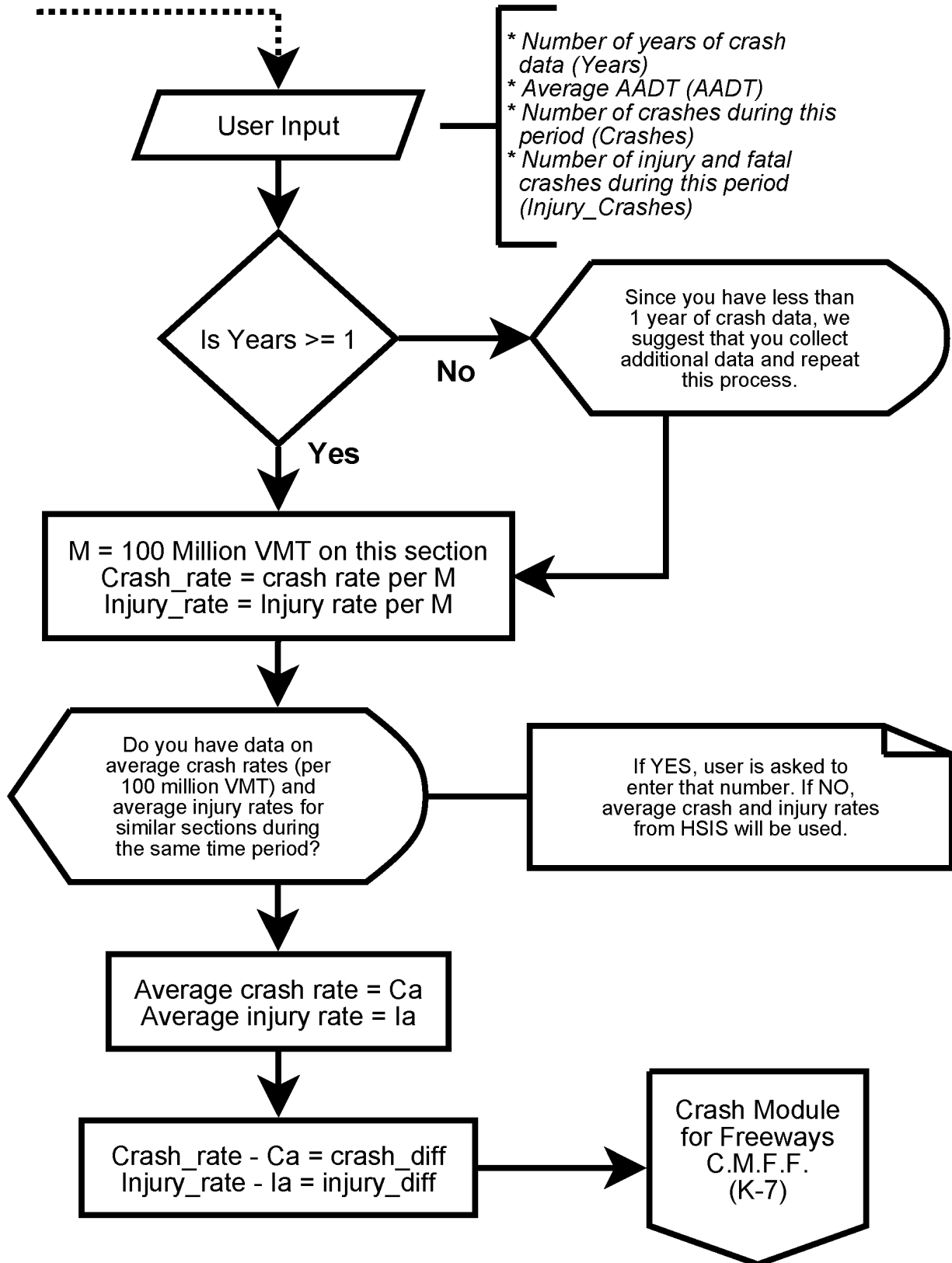


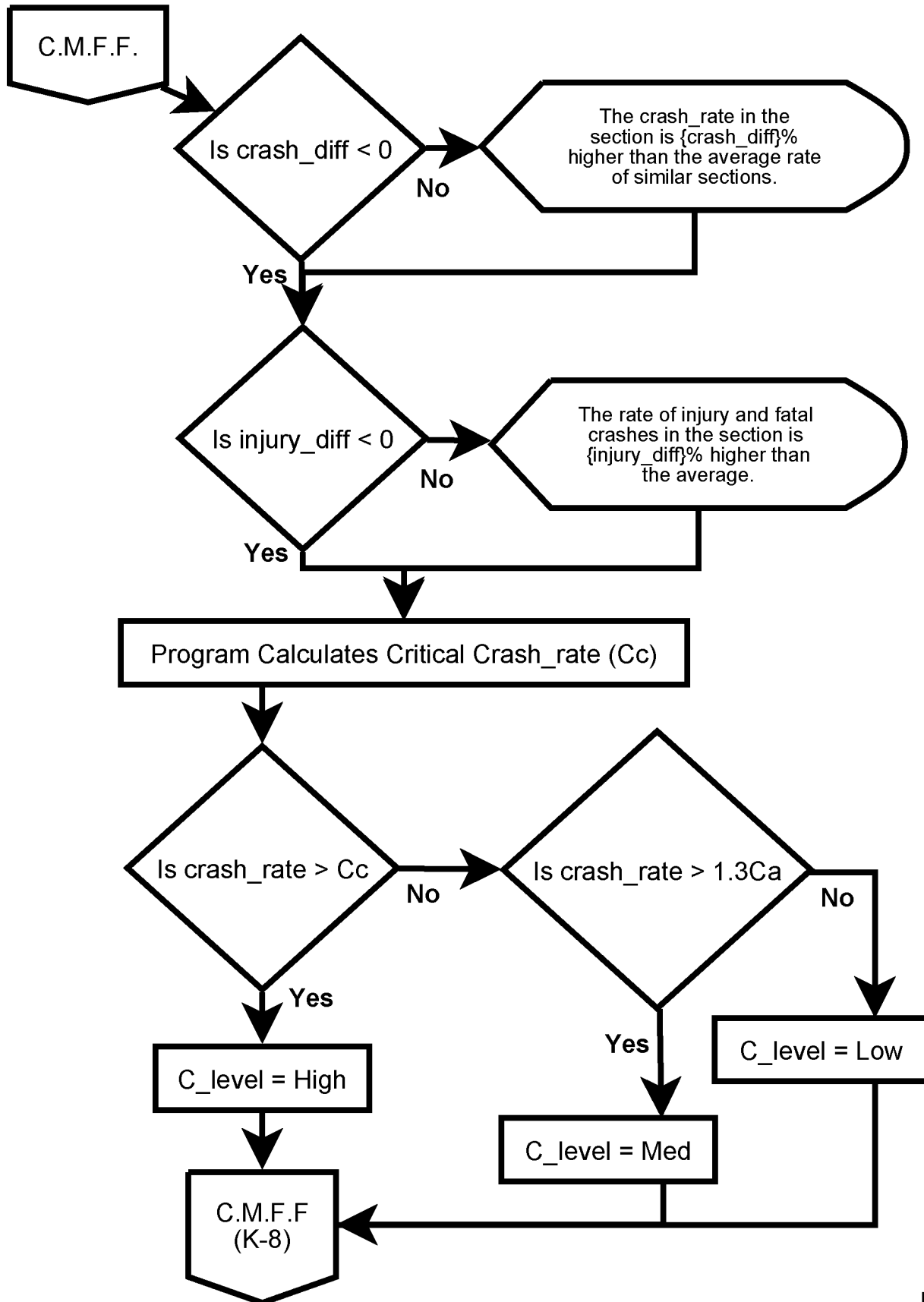


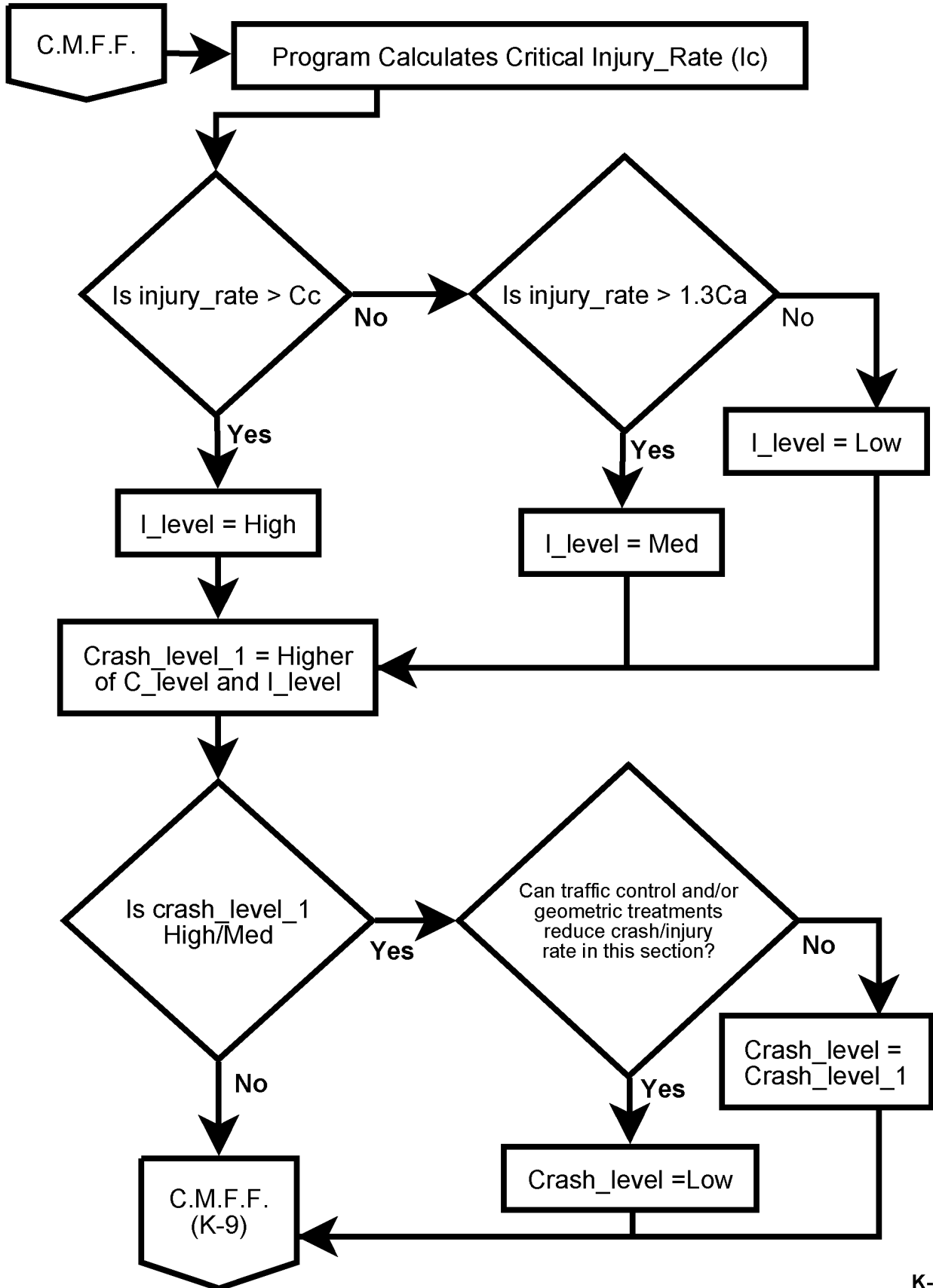
Speed Limit Calculation Without Crash Data (to calculate SL₁) (Limited Access Freeway)

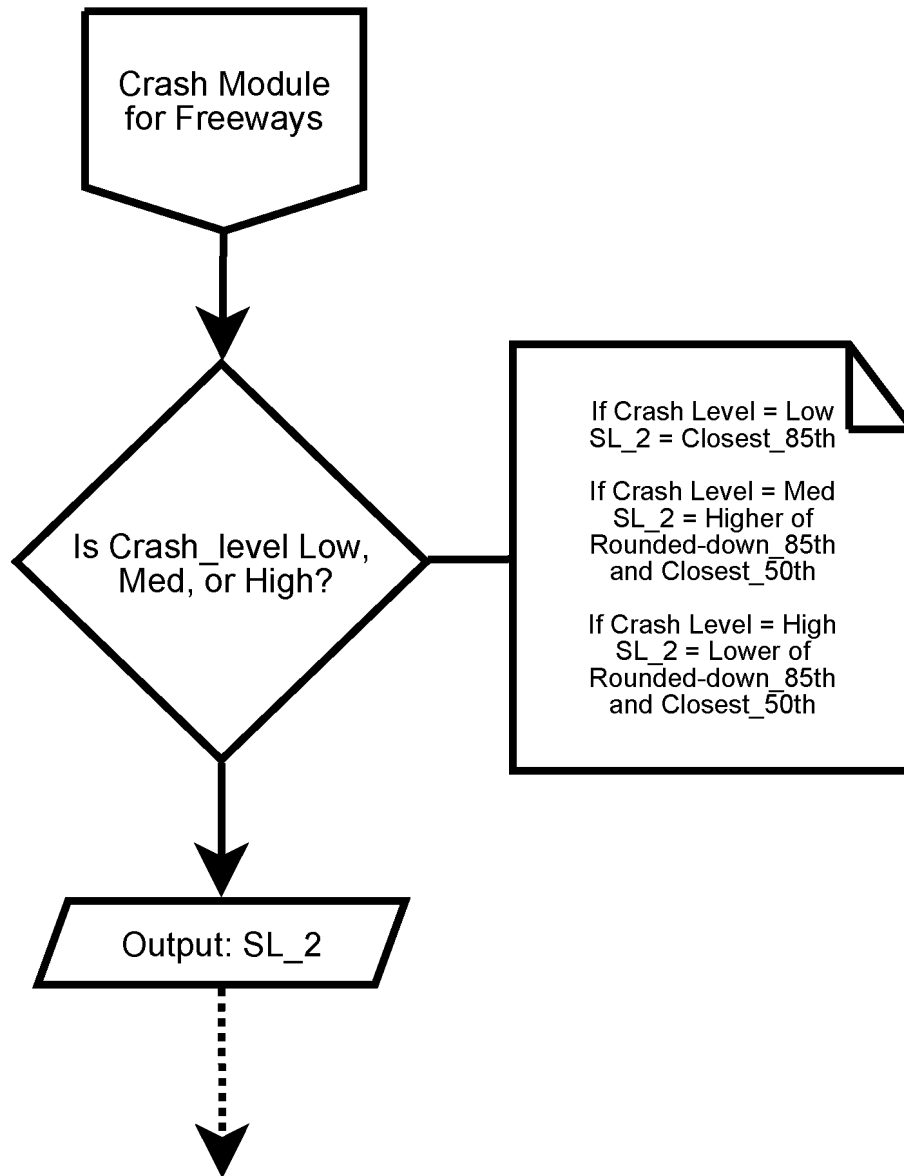


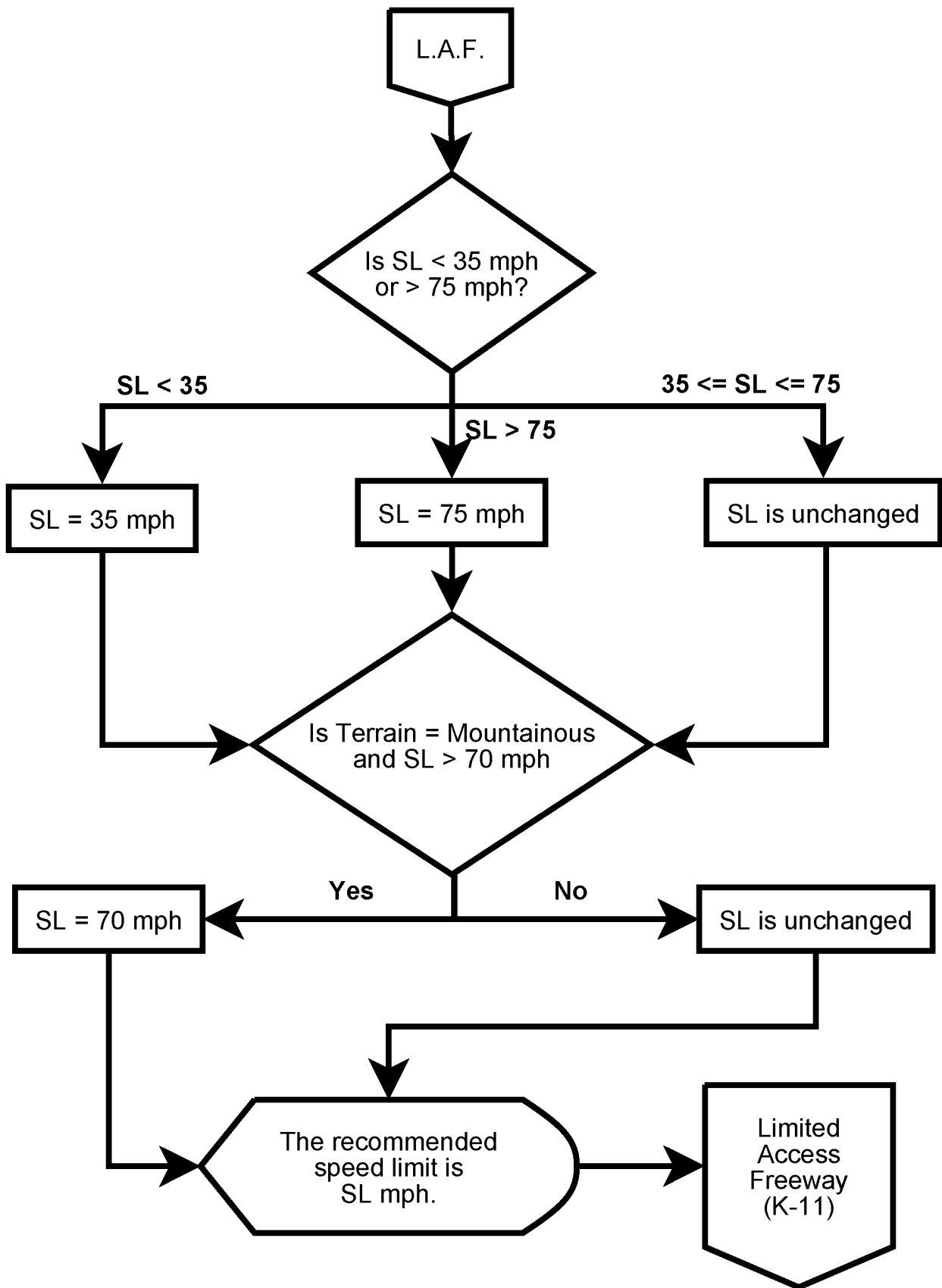
Crash Module for Freeways (to calculate SL₂)

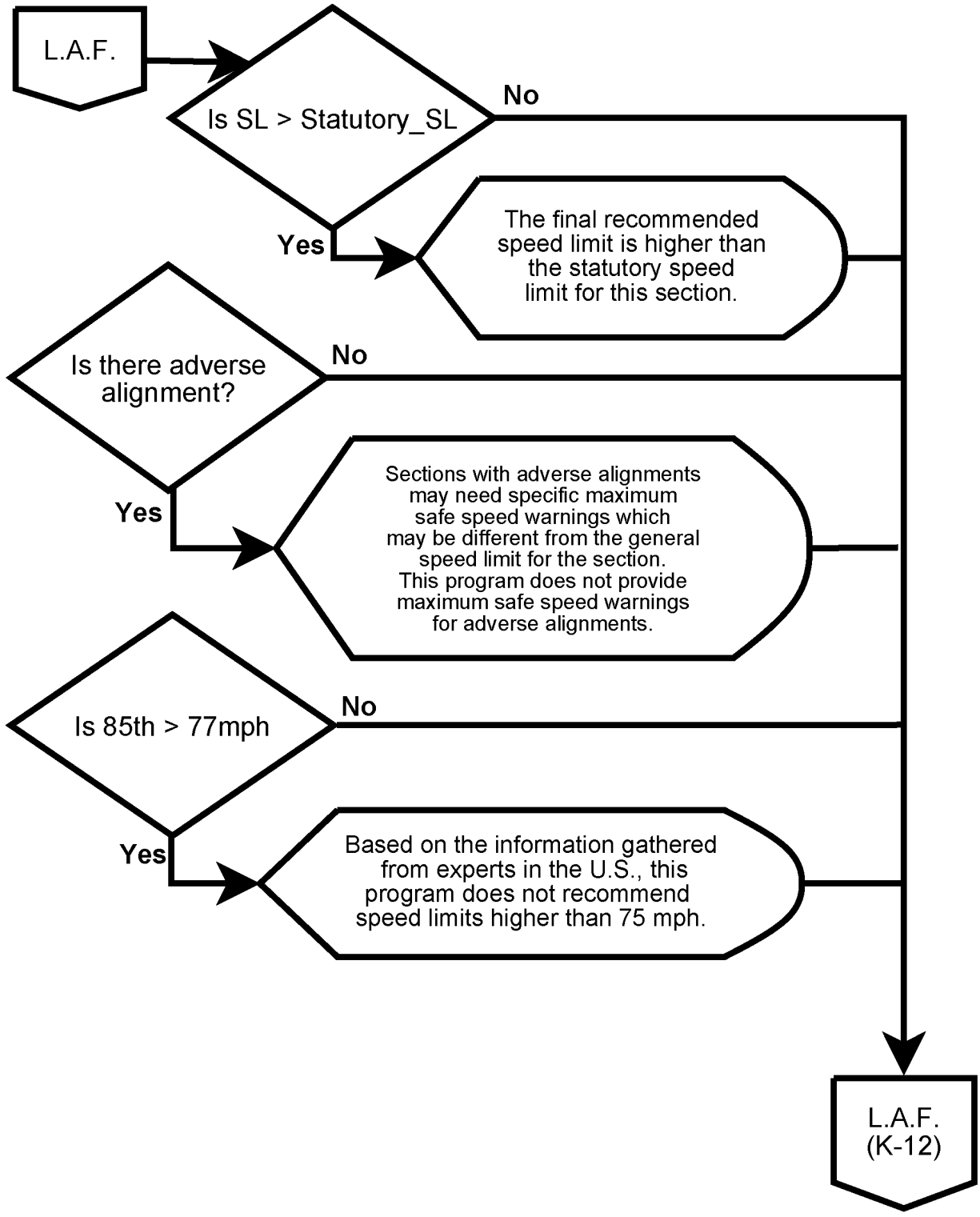


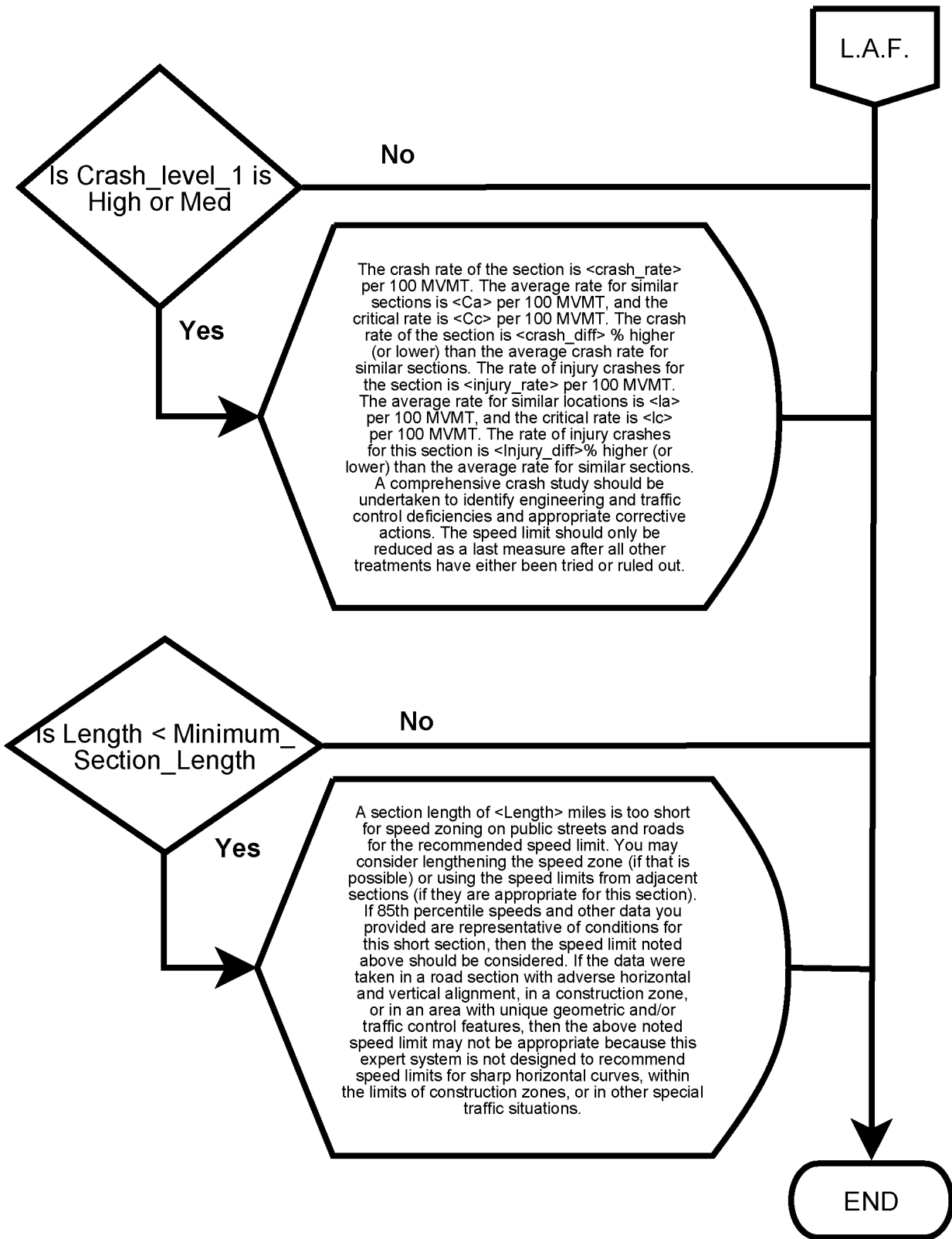


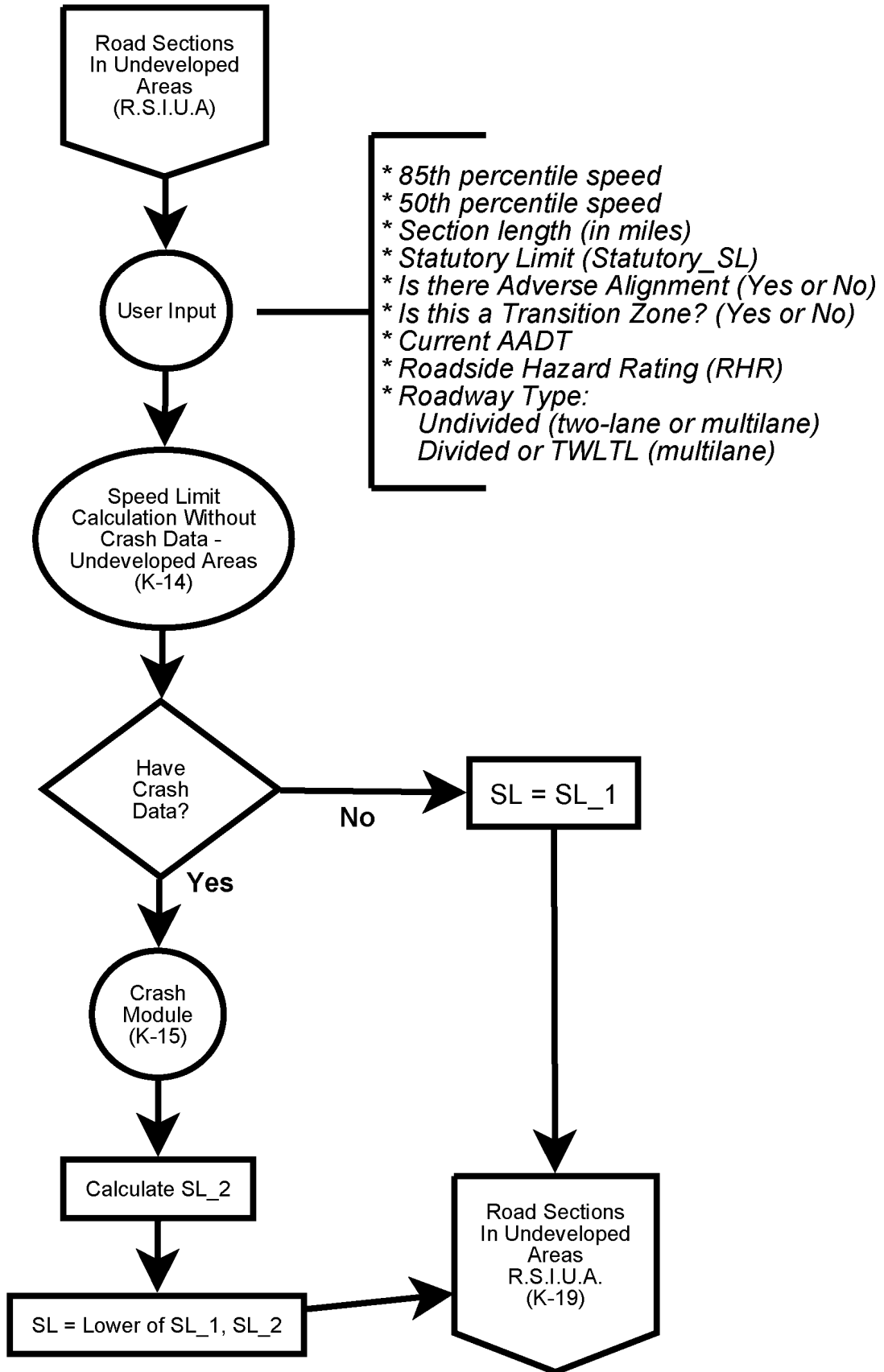




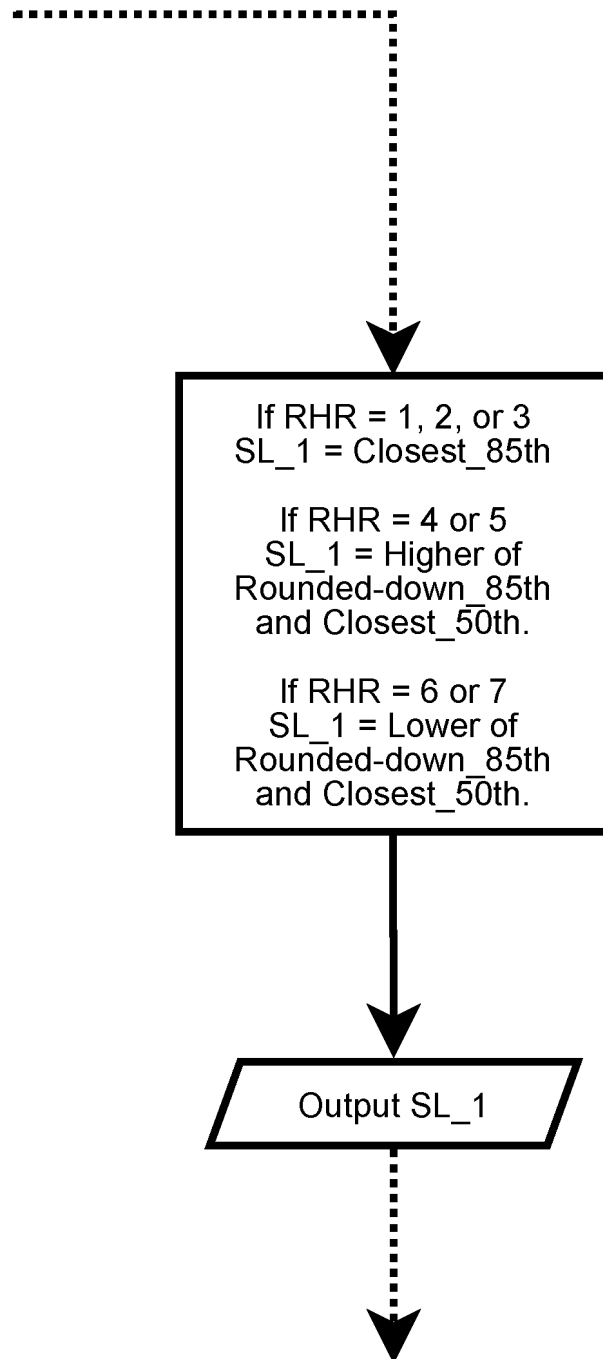




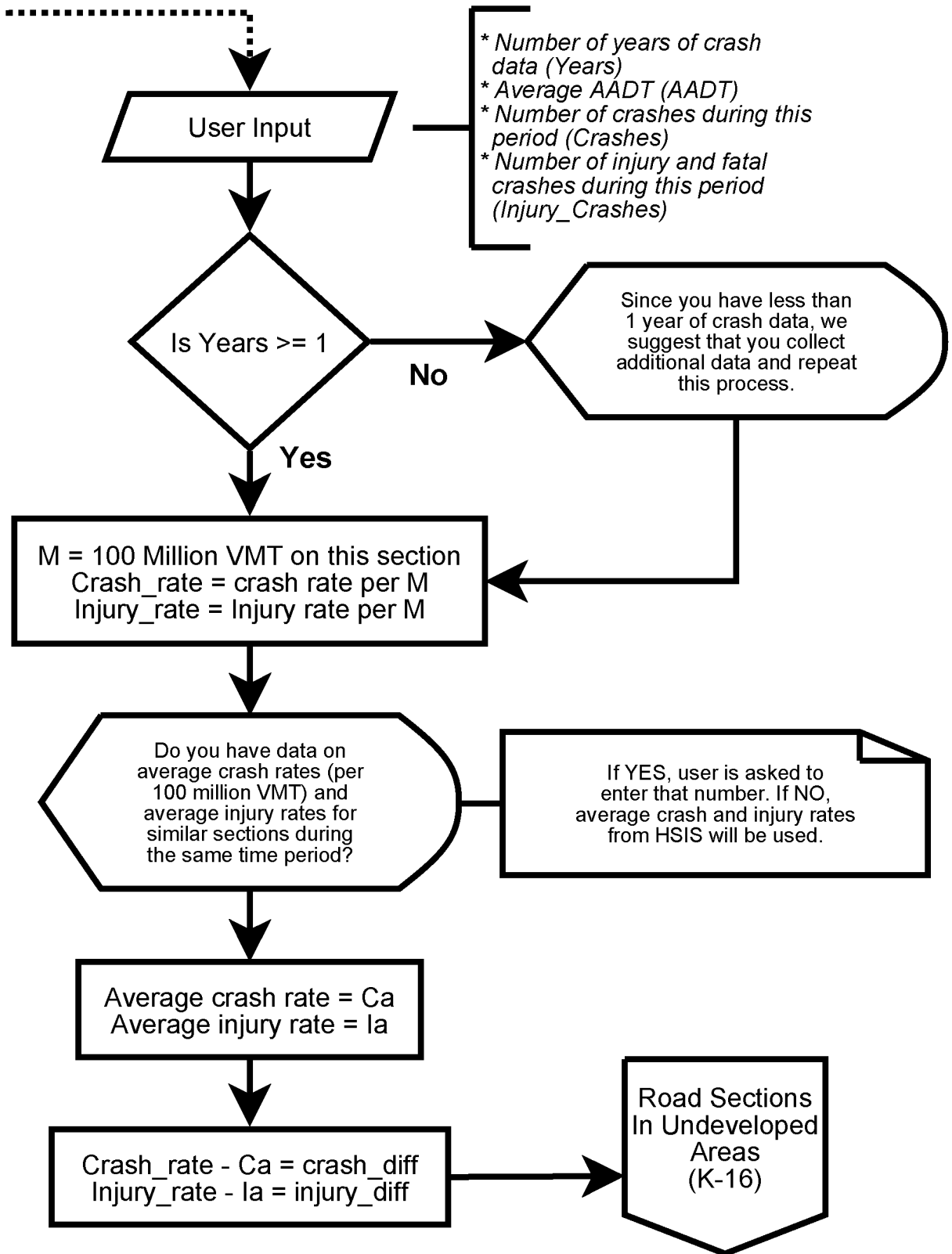


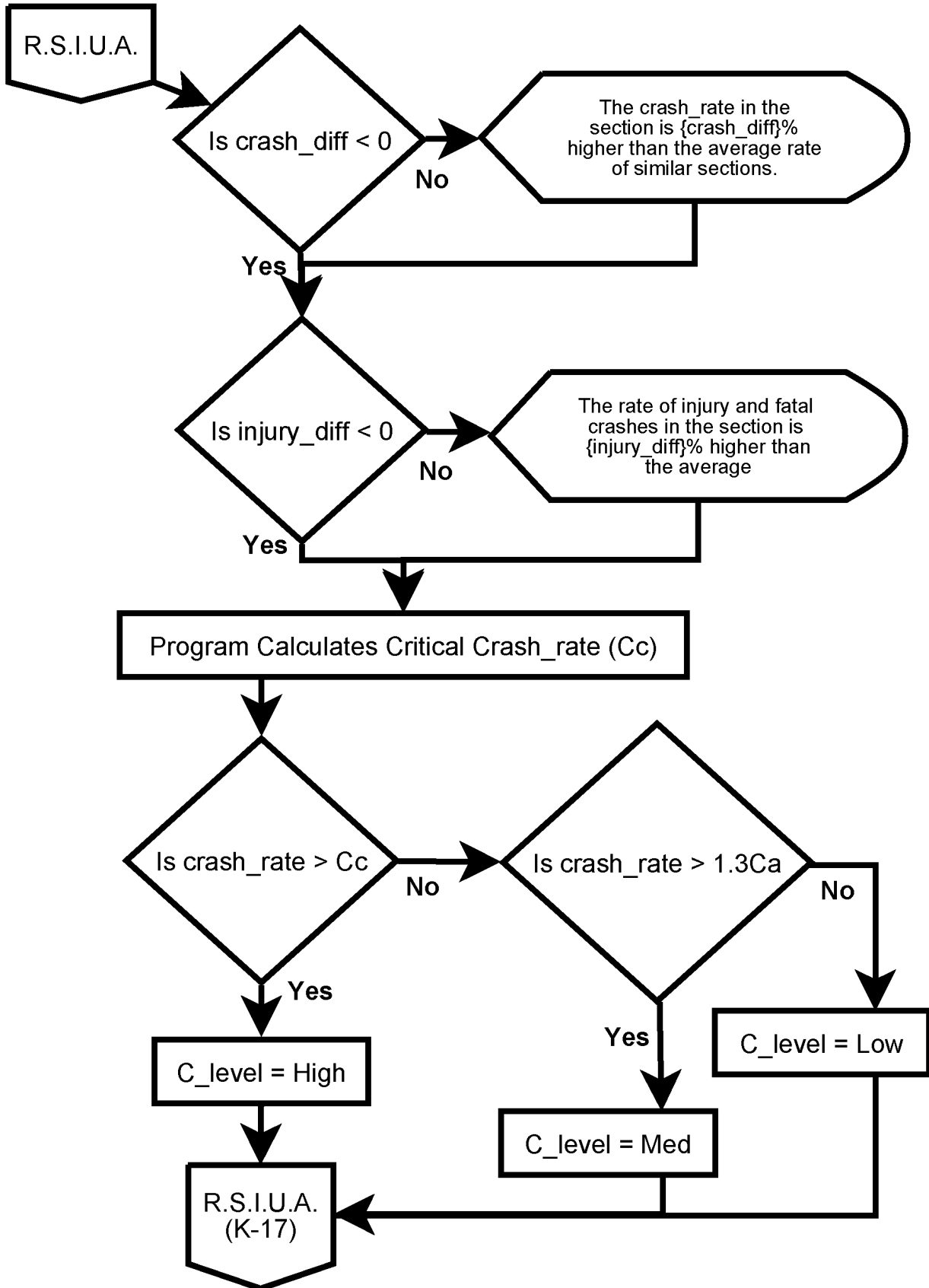


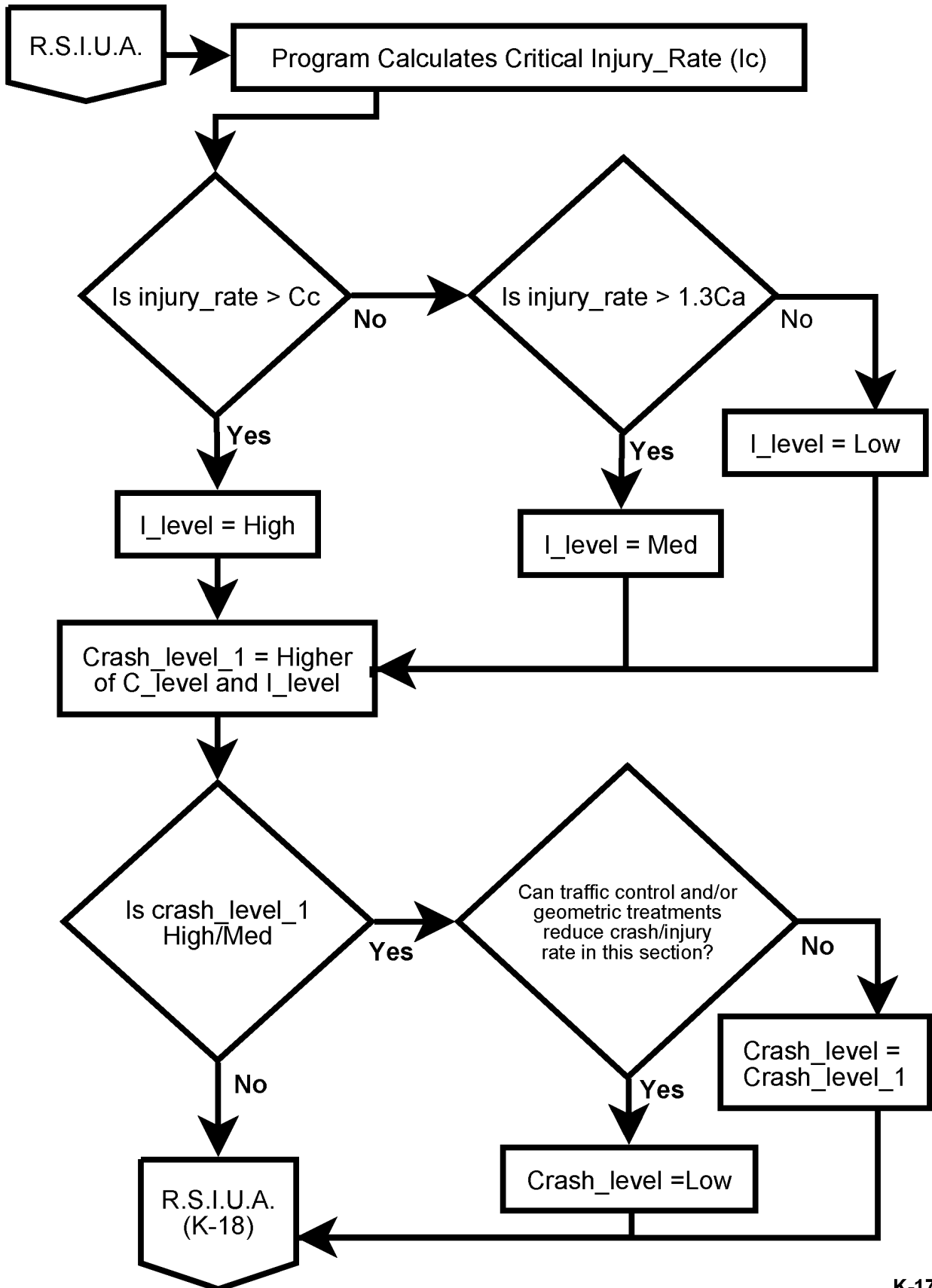
**Speed Limit Calculation Without Crash Data (to calculate SL₁)
(Roadway Section In Undeveloped Areas)**

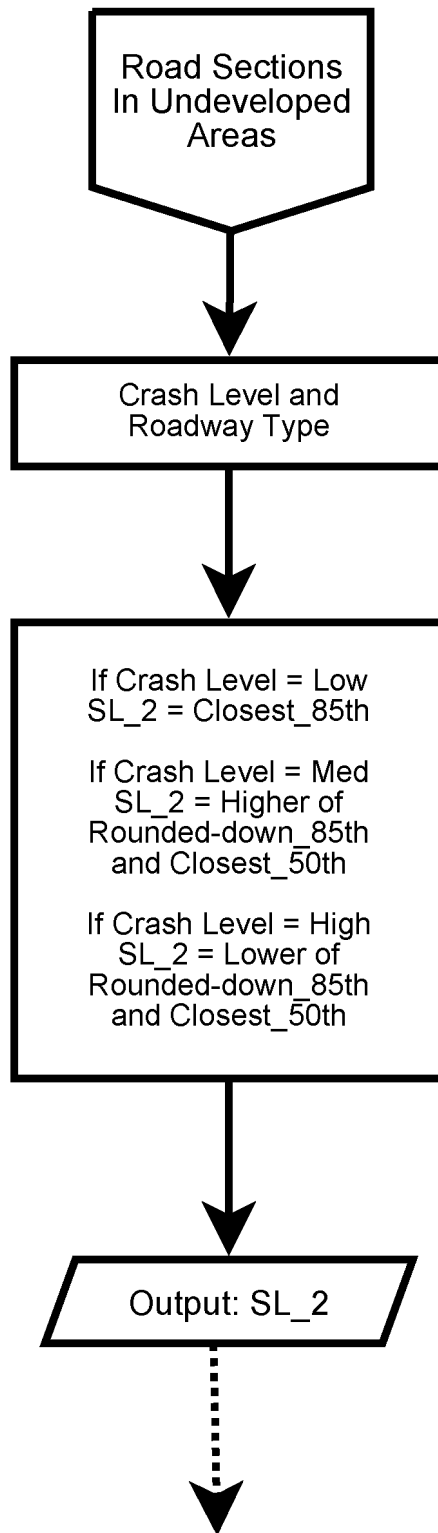


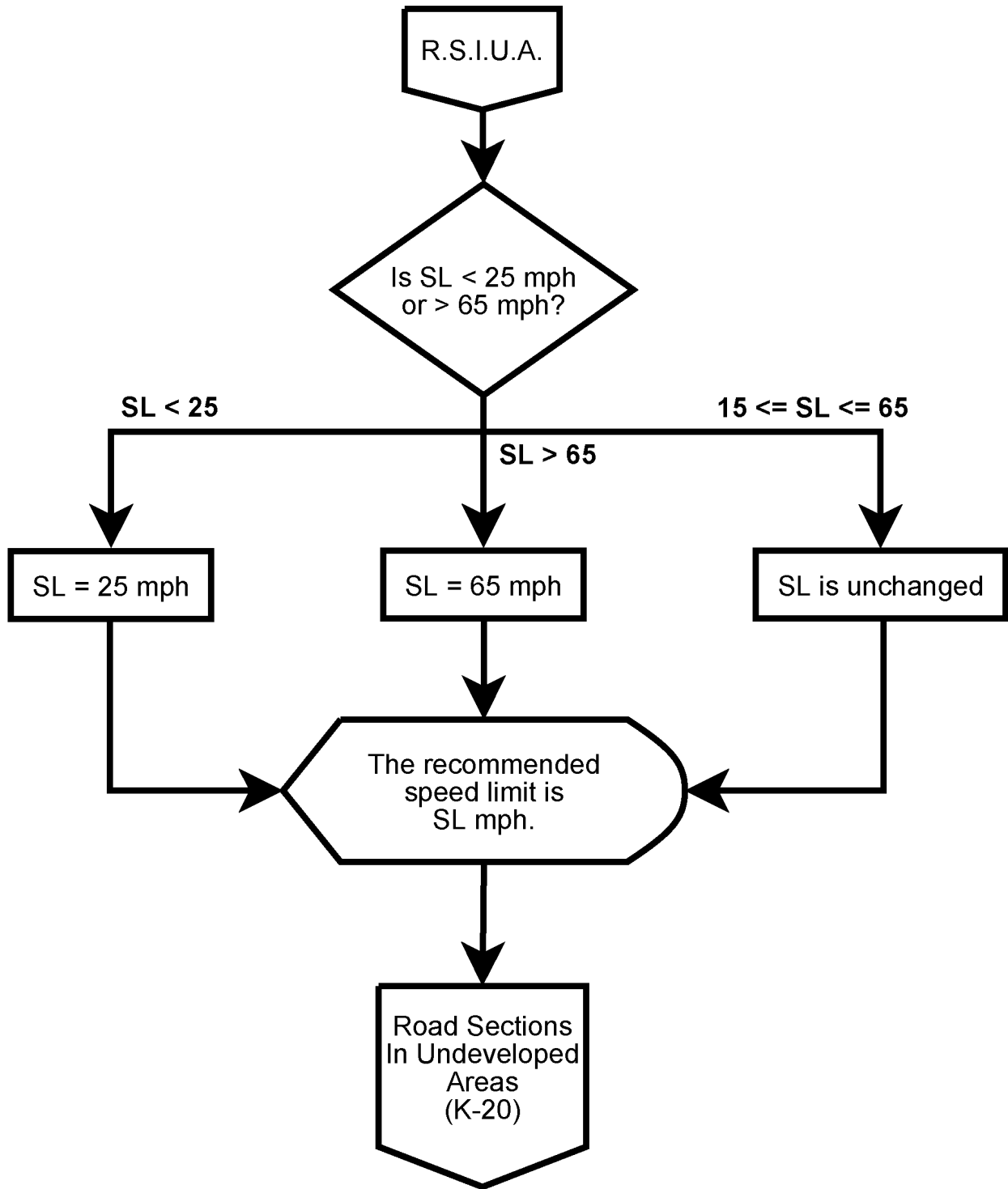
Crash Module for Roads in Undeveloped Areas (to calculate SL₂)

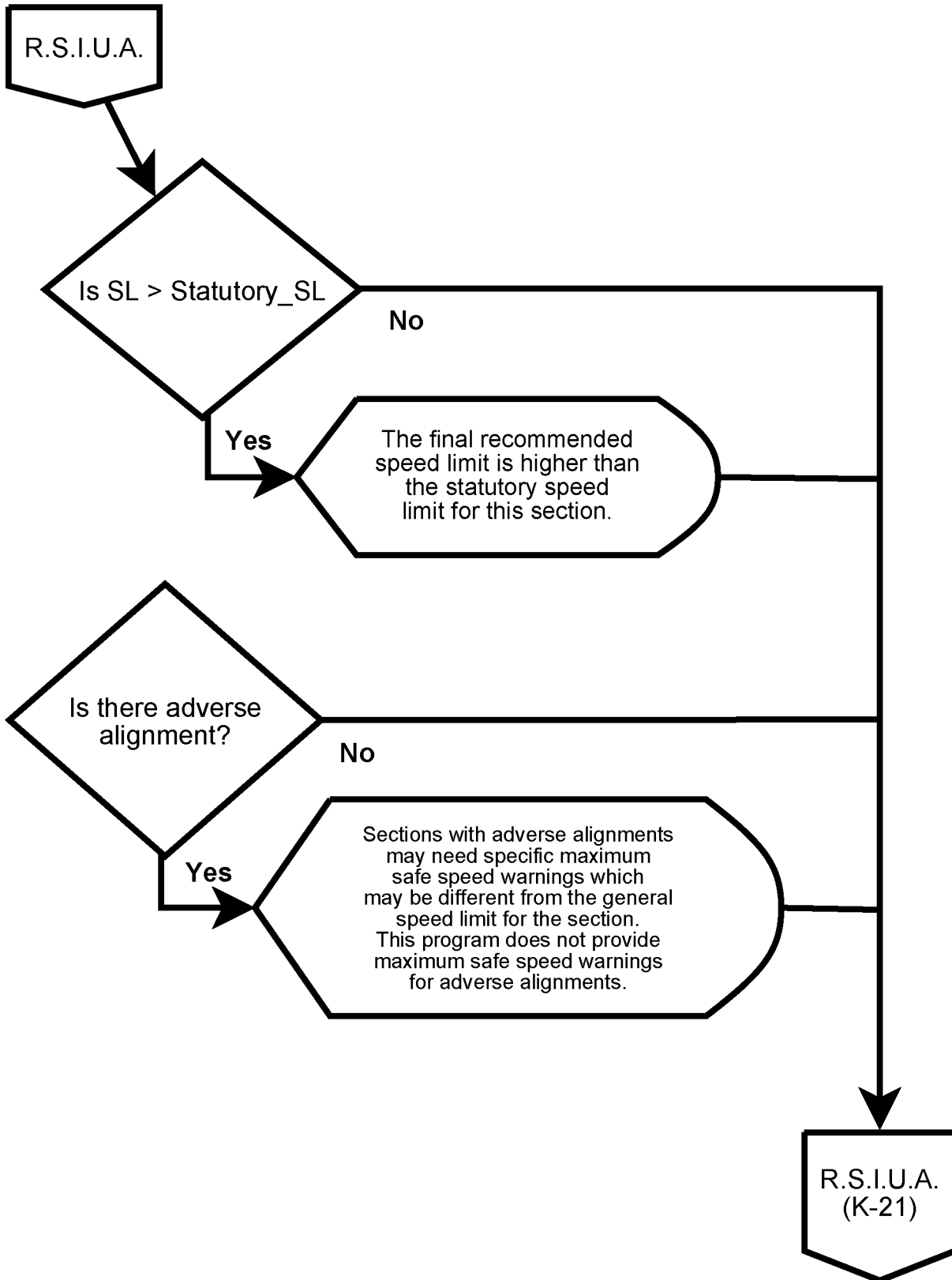


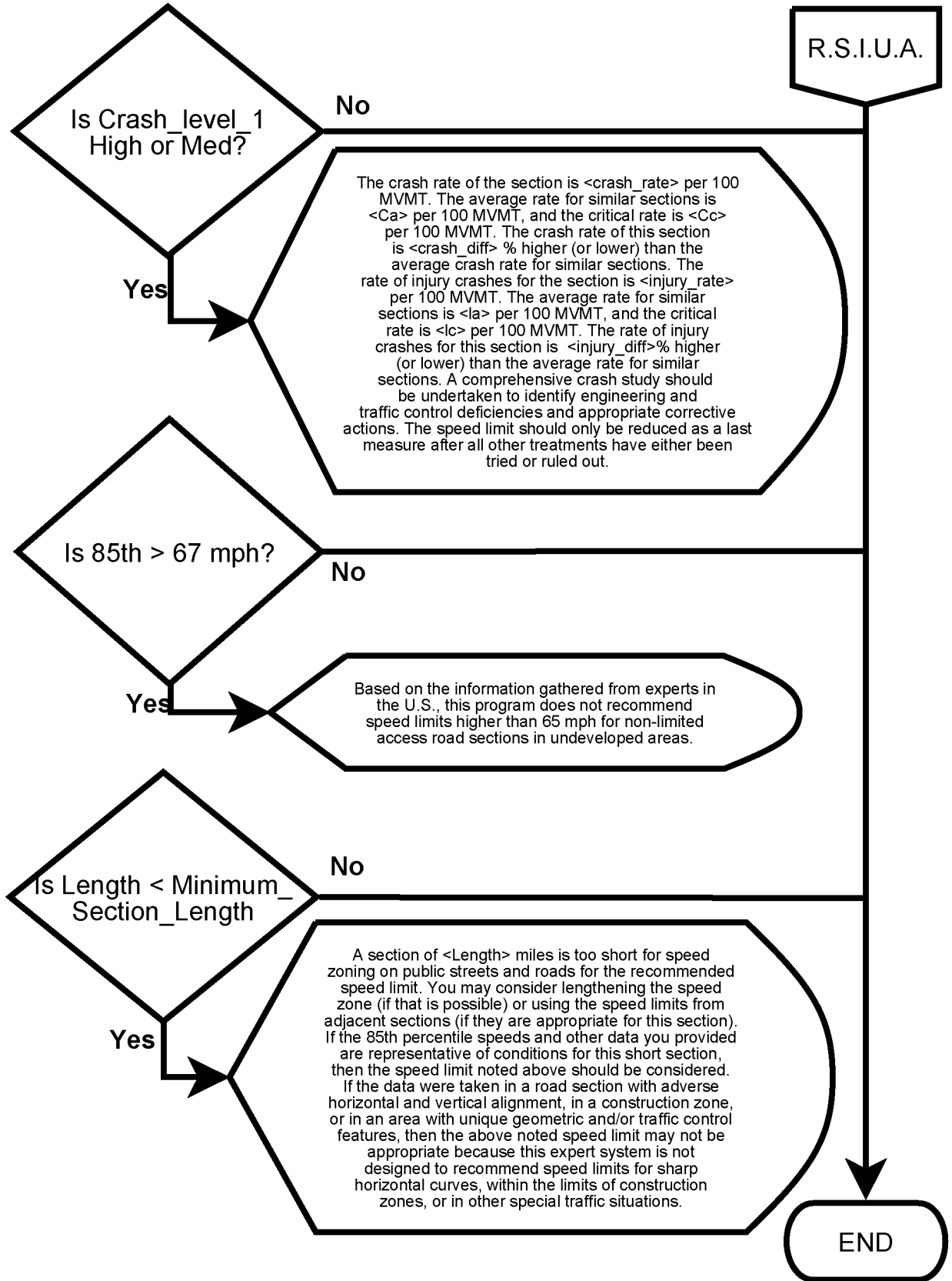


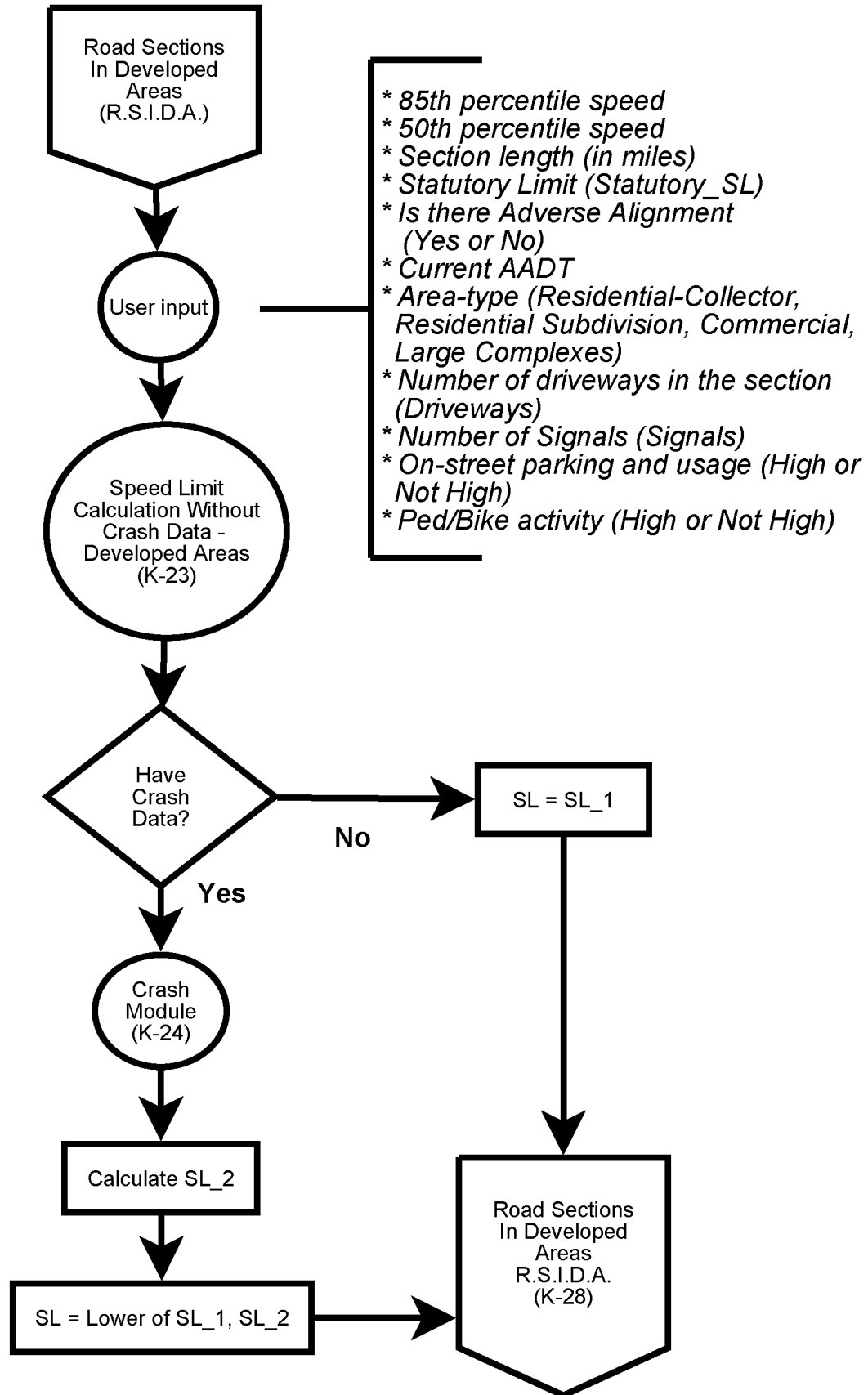




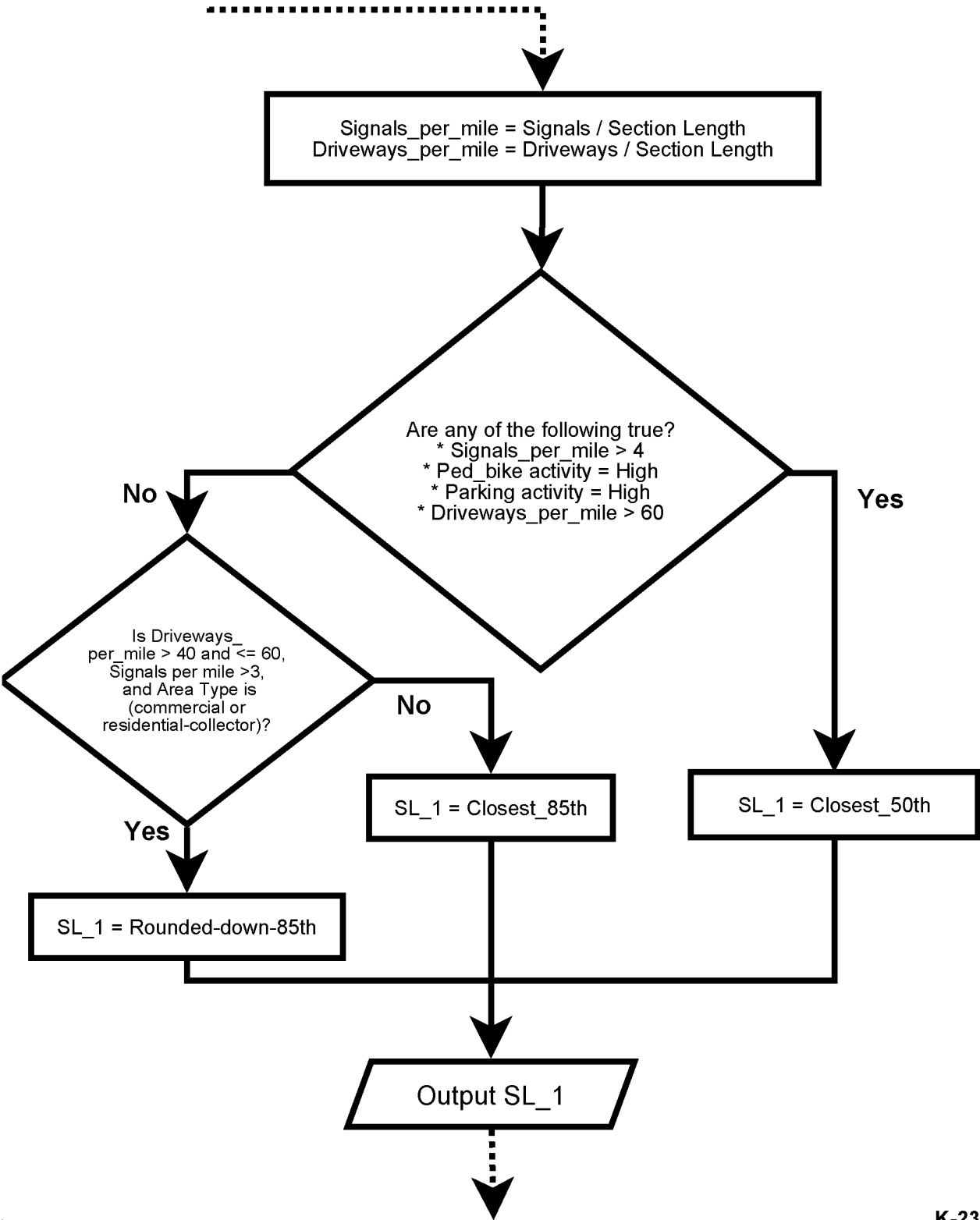








Speed Limit Calculation Without Crash Data (to calculate SL-1) (Roadway Section In Developed Areas)



Crash Module for Roads in Developed Areas (to calculate SL₂)

