VOLUME 1 INDEX

The index to Volume 1 lists the text citations of the terms defined in the Glossary (Volume 1, Chapter 9). Volumes 1, 2, and 3 are separately indexed. In the index listings, the first number in each hyphenated pair of numbers indicates the chapter, and the number after the hyphen indicates the page within the chapter.

A

Acceleration delay, 4-39, 4-41 Acceleration lane, 6-21 Access point, 2-13, 3-13, 7-11, 8-6 Accessibility, 1-2, 2-10, 5-11, 8-9 Accuracy, 1-16, 2-4, 4-26, 5-4, 6-4, 6-6, 6-32, 7-1, 7-4, 7-8, 7-9, 8-11, 8-14, 8-15, 8-17, 8-18 Active passings, 2-9, 8-13 Active traffic and demand management (ATDM), 1-6, 1-7, 1-8, 1-11, 1-12, 1-13, 1-15, 4-25, 6-11, 6-13, 7-10, 7-11 Actuated control, 6-10, 6-25 Adjustment, 4-24 Adjustment factor, 1-16, 6-10 Algorithm, 4-26, 6-6, 6-27, 6-28, 7-4, 7-5, 7-17, All-way STOP-controlled, 1-7, 2-14, 2-18, 4-3, 4-18, 5-14, 6-12, 6-18, 7-8, 7-10, 8-6 Alternative intersection, 1-1, 1-2, 1-7, 1-17, 2-8, 8-6, 8-12, 8-20 Alternative tool, 1-5 to 1-7, 1-19, 5-4, Chapter 6, Chapter 7, 8-11, 8-16, 8-17, 8-21 Analysis hour, 3-11, 4-3, 4-4, 4-38, 8-3 Analysis period, 1-13, 2-14, 2-15, 3-11, 4-9, 5-5, 5-6, 6-1, 6-10, 6-13, 6-19, 6-27, 7-13, 7-14, 7-27, 7-31, 7-34 to 7-38, 8-3, 8-17, 8-18 Analytical model, 6-2, 6-9, 6-15 Approach, 4-17 to 4-20, 4-27, 4-44 Approach delay, 1-16 Area type, 3-17, 6-32, 6-33 Arrival rate, 4-20, 4-21 Automobile, 2-1, 2-8, 2-9, 2-11, 2-17, 3-2, 3-15, 3-20 to 3-22, 3-24, 3-26, 3-28, 3-31, 3-32, 3-35, 4-37 to 4-39, 4-43, 5-1, 5-9, 5-12, 6-5, 6-33, 7-1, 7-2, 7-5, 8-1, 8-8 to 8-10, 8-13 Autonomous vehicle, 3-4 Auxiliary lane, 6-21, 7-28 Average annual daily traffic (AADT), 3-6, 3-10, 3-12, 3-13 Average bicyclist, 5-9 Average running speed, 4-5 Average spot speed, 4-5 Average travel speed, 1-15, 4-4 to 4-6, 5-5, 5-7, 5-11, 5-13, 7-11, 7-12, 8-12

B

Back of queue (BOQ), 4-20, 5-5, 7-12, 7-13, 7-20, 7-21 Barrier, 3-26, 4-29 Base capacity, 8-3 Base conditions, 2-14, 3-5, 4-22 Base free-flow speed, 1-15, 1-16, 7-6 Basic freeway segment, 1-6, 1-11, 1-14, 2-8, 5-9, 5-10, 6-33, 7-6, 7-7, 7-11, 8-4, 8-12 Bicycle, 1-1, 1-4, 1-6, 1-7, 1-10, 1-11, 1-15 to 1-18, 2-1, 2-3, 2-7 to 2-9, 2-11, 2-13, 2-17, 3-16, 3-21, 3-24 to 3-32, 3-35, 3-37, 4-1, 4-37, 4-38, 4-41, 4-42, 4-46, 5-2, 5-8, 5-10, 5-12 to 5-15, 6-5, 6-12, 6-18, 6-19, 6-21, 7-5, 7-7, 7-10, 8-1, 8-6 to 8-8, 8-10, 8-12 to 8-14, 8-19 Bicycle facility, 1-7, 2-7 to 2-9, 2-13, 3-27, 3-29 to 3-31, 4-37, 4-38, 5-10, 5-15, 8-1, 8-6, 8-7, 8-12, 8-13 Bicycle lane, 2-3, 3-30 to 3-32, 4-37, 4-38, 4-41, 5-10, 5-13, 7-7, 8-14 Bicycle mode, 1-7, 1-16, 2-11, 2-17, 3-27, 8-1, Bicycle path, 1-7, 2-7, 3-27, 3-28, 4-37, 4-38, 8-6 Bicycle speed, 3-27, 4-1, 4-37, 8-7 Bicycle track, 4-37, 4-38 Body ellipse, 4-28 Bottleneck, 2-14, 2-15, 3-5, 3-11, 4-2, 4-3, 4-7, 6-12, 6-20, 7-12, 7-14, 7-34, 7-38, 8-3 Boundary intersection, 1-16 Breakdown, 2-14, 2-15, 3-3, 3-5, 4-12, 6-20, 8-2, Buffered bicycle lane, 3-30 Bus lane, 4-40 to 4-42 Bus mode, 3-34 Bus stop, 2-3, 3-26, 3-31, 3-35, 4-32, 4-39 to 4-44, 8-8, 8-14 Bus stop failure, 4-39

C

Calibration, 1-10, 1-14, 1-17, 6-6, 6-7, 6-11, 6-13, 6-19, 6-23 to 6-25, 6-27, 6-32, 7-31, 7-33 Capacity, 1-1, 1-2, 1-4, 1-5, 1-6, 1-10, 1-11, 1-13, 1-14, 1-17, 1-18, 2-1, 2-6, 2-7, 2-10, 2-12, 2-13 to 2-15, 2-16, 2-17, 3-1, 3-2, 3-4 to 3-6, 3-10 to 3-13, 3-15 to 3-17, 3-22, 3-24 to 3-27, 3-32 to 3-34, 3-36 to 3-38, Chapter 4, 5-5, 5-6, 5-9 to 5-11, 6-3, 6-7, 6-10, 6-13, 6-17, 6-20 to 6-23, 6-26, 6-32, 7-6, 7-10, 7-12, 7-13, 7-16, 7-17, 7-21, 7-26, 7-27, 7-30, 7-31, 7-34, 7-36, 7-37, 8-1 to 8-6, 8-9, 8-15, 8-16, 8-18, 8-19 Capacity adjustment factor (CAF), 7-6 Centerline, 2-9, 5-15, 8-13 Central business district (CBD), 3-6, 3-32, 4-35, 4-40 Change interval, 4-16, 4-17, 6-10 Clearance interval, 3-16, 3-26, 4-28 Clearance lost time, 4-16, 4-17 Clearance time, 4-16, 4-44 Climbing lane, 3-15 Cloverleaf interchange, 6-12 Complete trip, 7-20 Composite grade, 1-13 Computational engine, 1-8, 1-9, 6-6 Conflict, 1-16, 2-9, 3-16, 3-22, 4-18, 4-24, 4-33, 4-34, 4-36, 5-14, 8-8, 8-13 Congestion, 1-12, 2-4, 2-9, 2-10, 2-13, 2-19, 3-4, 3-11, 3-32, 3-35, 4-40, 7-14, 7-19, 7-23, 7-34, 7-36 to 7-38, 8-4, 8-9, 8-15, 8-22 Congestion pricing, 2-4, 6-9, 6-13, 6-19, 6-28, 8-15 Connected vehicle, 3-4 Control condition, 3-2, 4-1, 4-21, 4-22, 8-2 Control delay, 1-17, 2-18, 4-14, 4-19, 4-38, 5-3, 5-14, 7-8, 7-11, 7-14, 7-23 to 7-26, 7-37, 8-7 Controller, 6-22 Coordination, 4-41, 6-21 Corridor, 1-20, 2-1, 2-2, 2-6, 2-7, 4-22, 4-25, 4-42, 6-2, 6-12, 6-13, 6-15 to 6-17, 6-30, 7-2, 8-4 Crawl speed, 3-17 Critical density, 4-8 Critical headway, 4-18, 7-4 Critical speed, 4-8 Cross flow, 3-26, 4-29, 4-32, 4-33, 8-8 Crosswalk, 3-15, 3-24 to 3-26, 4-29, 4-44, 5-14, 8-8 Curb extension, 4-41 Cycle, 2-13, 2-14, 4-14, 4-16, 4-17, 4-20, 4-21, 4-24, 4-37 to 4-39, 4-41, 4-46, 6-10, 6-18, 6-28, 7-21, 7-30, 8-6

Cycle length, 4-17, 4-21, 4-24, 4-39, 4-41

Cycle failure, 2-14

D

Daily service volume, 6-32 Deceleration delay, 4-39 Deceleration lane, 6-21, 7-15 Default value, 1-6, 1-7, 1-10, 1-11, 2-1, 2-3, 2-4, 6-1 to 6-4, 6-13, 6-14, 6-24, 6-32, 6-33, 7-1, 7-3, 7-4, 8-14, 8-15, 8-21 Degree of saturation, 7-29 Delay, 1-6, 1-16, 2-1, 2-5, 2-7 to 2-10, 2-13, 2-16, 2-18, 3-4, 3-5, 3-14 to 3-16, 3-21, 3-22, 3-25 to 3-27, 3-34, 3-35, 4-1, 4-13, 4-14, 4-17 to 4-19, 4-25, 4-38 to 4-43, 5-2, 5-3, 5-5, 5-8, 5-10 to 5-14, 6-6 to 6-8, 6-10, 6-11, 6-17, 6-18, 6-29, 7-2, 7-8 to 7-11, 7-14, 7-16, 7-17, 7-19, 7-22 to 7-27, 7-29 to 7-31, 7-35 to 7-39, 8-1, 8-4 to 8-13, 8-17 Demand flow rate, 5-4, 7-11, 7-15, 7-32 Demand volume, 3-5, 4-2, 6-3, 6-10, 6-27, 7-8, 7-11 to 7-14, 7-26, 7-30, 7-31 Demand-to-capacity (d/c) ratio, 2-10, 4-3, 5-5, 6-18, 7-27, 7-35 to 7-37, 8-12 Density, 1-5, 1-14, 2-8, 2-14, 2-16, 3-4, 3-5, 3-12, 3-15, 3-24, 3-27, 3-32, 4-1, 4-2, 4-5 to 4-8, 4-10, 4-29 to 4-33, 5-9, 5-10, 5-12, 6-7, 6-18, 6-21, 6-24, 6-32, 6-33, 7-2, 7-6, 7-7, 7-10, 7-14 to 7-16, 7-27, 7-28, 7-31, 7-32, 7-38, 8-5, 8-12 Departure headway, 4-14, 4-18 Descriptive model, 6-8, 6-9 Design analysis, 2-1, 2-3, 2-4, 6-4, 8-14, 8-15 Design hour, 3-11, 7-3 Design speed, 4-23, 5-11 Detector, 3-9, 3-36, 4-5, 4-6, 6-23 Deterministic model, 4-26, 6-7, 6-10, 6-19, 7-17, 7-31, 8-16 Deterministic queue delay, 7-36 D-factor, 3-12, 3-13, 6-32 to 6-34 Directional distribution, 3-12, 3-13, 4-18, 4-23, 4-24 Directional split, 3-25, 4-33 Distributed intersection, 1-17 Diverge, 1-6, 1-14, 2-6 to 2-8, 2-18, 6-12, 6-20, 7-10, 7-11, 7-15, 7-28, 7-32, 8-4, 8-5 Diverge segment, 1-14, 2-7, 2-8, 7-11, 8-4, 8-5 Diverging diamond interchange (DDI), 1-12, 1-17, 6-12 Divided highway, 3-15 Driver population, 1-14, 4-23, 4-24 Duration of congestion, 2-10 Dwell time, 4-40, 4-43, 4-44

Dwell time variability, 4-43

Dynamic traffic assignment model, 7-32

E

Effective green time, 4-14
Effective red time, 4-21
Effective walkway width, 4-33, 4-34
Empirical model, 6-10
Environmental conditions, 2-13, 4-14, 4-19, 4-25, 8-2, 8-4
Event, 3-27, 3-29
Exclusive bus lane, 3-35, 4-41
Exclusive turn lane, 4-23
Experienced travel time, 1-17, 2-8, 6-28
Extent of congestion, 2-10, 4-3, 8-3
Extra distance travel time, 1-17, 2-18

F

Facility, 1-1, 1-2, 1-4, 1-5, 1-7, 1-12, 1-15, 1-18, 2-1 to 2-7, 2-9 to 2-11, 2-13 to 2-16, 3-1, 3-2, 3-4, 3-5, 3-9 to 3-15, 3-17, 3-22 to 3-27, 3-29, 3-30, 3-32, 3-34, 4-1, 4-2, 4-5 to 4-7, 4-9 to 4-14, 4-20, 4-22, 4-25, 4-28, 4-29, 4-31 to 4-38, 4-40, 4-43, 4-44, 5-1 to 5-5, 5-8 to 5-12, 5-14, 5-15, 6-3, 6-7, 6-11, 6-13 to 6-15, 6-19, 6-26, 6-30, 6-32, 7-3 to 7-5, 7-9, 7-12 to 7-14, 7-17, 7-23, 7-26, 7-32, 7-34 to 7-38, 8-1, 8-4 to 8-6, 8-8 to 8-10, 8-13 to 8-19 Failure rate, 4-43 Far-side stop, 4-39 Flow rate, 2-14, 2-15, 3-5, 3-27, Chapter 4, 6-8, 7-15, 8-2, 8-3 Flow ratio, 2-17 Follower density, 7-28 Follow-up headway, 4-18 Free-flow speed (FFS), 1-14, 1-15, 2-9, 2-14, 2-15, 4-5, 4-8 to 4-14, 4-18, 4-19, 4-37, 5-11, 6-23, 6-24, 6-32, 7-5, 7-11, 7-12, 7-14, 7-22, 7-23, 7-26, 8-3, 8-5 Free-flow travel time, 4-11, 4-12 Freeway, 1-1, 1-6, 1-8, 1-11 to 1-14, 1-18, 2-1, 2-4, 2-7, 2-8, 2-11, 2-13 to 2-19, 3-7, 3-8, 3-10 to 3-15, 3-17, 3-19, 3-28, 3-37, 4-1, 4-7 to 4-11, 4-25, 4-27, 5-8, 5-10, 5-16, 6-2, 6-8, 6-10, 6-12 to 6-14, 6-17, 6-18, 6-21, 6-23, 7-5, 7-6, 7-10 to 7-12, 7-14, 7-15, 7-19, 7-23, 7-28, 7-34, 7-35, 7-38, 8-1 to 8-6, 8-10, 8-12, 8-15, 8-19, 8-22 Freeway auxiliary lane, 2-13, 8-4 Freeway facility, 1-13, 2-7, 2-8, 3-15, 4-10, 5-10, 6-2, 6-14, 7-5, 7-12, 7-14, 7-19, 7-28, 7-34, 7-38, 8-12 Freeway junction, 6-23 Freeway weaving segment, 2-7, 2-8, 8-4, 8-12 Freight, 3-2, 3-17, 6-13, 8-9 Full stop, 7-13 Furniture zone, 4-32, 4-36

G

Gap, 2-14, 3-4, 3-21, 3-35, 4-2, 4-13, 4-17, 4-18, 4-23, 4-24, 4-39, 5-12, 6-10, 7-4, 8-6, 8-8
Gap acceptance, 4-17, 4-18, 6-10
Generalized service volume table, 2-4, 6-2 to 6-4, 6-32, 8-14, 8-15
Geometric condition, 6-19
Geometric delay, 4-19, 7-26
Green time, 3-15, 3-16, 3-25, 3-35, 4-17, 4-24, 4-44, 6-10, 8-2, 8-8

Н

Headway, 3-2, 4-2, 4-6, 4-12 to 4-16, 4-18, 4-19, 4-23, 4-37, 4-45, 6-8, 6-24, 8-2, 8-3, 8-8 Heavy vehicle, 1-16, 2-4, 3-2, 3-16, 3-17, 3-26, 3-27, 3-31, 4-1, 4-22 to 4-24, 4-39, 6-32, 6-33, 7-8, 7-11, 7-31, 8-1 to 8-3, 8-8, 8-13, 8-15 Hidden bottleneck, 7-13 High-occupancy vehicle (HOV), 1-2, 2-3, 3-15 Hindrance, 3-22, 3-27 Hybrid models, 6-7, 6-9, 6-14, 6-17

I

Incident, 1-6, 1-7, 1-12, 1-13, 2-13, 2-14, 3-4, 4-9, 4-19, 4-25, 5-2, 6-8, 6-13, 6-19, 6-22, 7-11 to 7-13, 8-2, 8-4 Incident clearance time, 5-2 Incident delay, 4-19 Incomplete trip, 7-35, 7-37, 7-38, 8-17 Incremental delay, 6-10 Influence area, 2-6, 7-28, 8-4 Initial queue, 6-10, 7-14, 7-36, 7-37 Inputs, 1-11, 2-1, 2-3, 2-4, 2-16, 4-3, 4-38, 5-4, 5-7, 6-1, 6-3, 6-5 to 6-7, 6-9, 6-13 to 6-15, 6-22, 6-33, 7-1, 7-3 to 7-9, 7-12, 7-28, 7-32, 8-7, 8-11, 8-14, 8-16, 8-17 Intelligent transportation system (ITS), 2-4, 4-25, 6-19, 6-22, 6-23, 8-15 Intensity of congestion, 2-9, 2-10 Interchange, 1-7, 1-8, 1-17, 2-7, 2-15, 3-14, 4-3, 5-14, 6-17, 6-21, 6-32, 7-14, 7-35, 8-6, 8-12 Interchange ramp terminal, 1-7, 1-17, 2-7, 2-15, 5-14, 8-6, 8-12 Interrupted flow, 2-13, 4-2, 4-14, 7-36, 8-2, 8-6 Intersection delay, 1-16, 3-22, 6-12, 7-17, 8-8 Interval, 3-15, 4-2, 4-4, 4-16, 4-35, 5-4, 5-11, 6-23, 6-28, 7-14, 7-19, 7-21, 7-28, 7-29, 7-37 to 7-39, 8-17 Island, 3-30, 4-12, 4-13, 4-41, 5-12, 5-14

1

Jam density, 4-8, 7-12

K

K-factor, 3-12, 3-13

L

Lane 1, 3-14, 4-13 Lane 2, 3-14, 4-13 Lane addition, 2-6, 6-21, 6-23 Lane distribution, 3-13, 3-14, 4-24 Lane width, 2-4, 2-14, 4-23, 4-37, 6-32, 7-6, 7-7, 7-9, 8-15 Lateral clearance, 4-23 Level of service (LOS), 1-1, 1-4 to 1-7, 1-12, 1-14 to 1-17, 2-1 to 2-4, 2-8, 2-9, 2-11, 2-12, 2-16, 2-17, 3-1, 3-2, 3-11, 3-13, 4-1, 4-4, 4-8, 4-10, 4-13, 4-19, 4-22, 4-24, Chapter 5, 6-1, 6-3, 6-27, 6-32 to 6-34, 7-1, 7-3, 7-5 to 7-11, 7-13 to 7-16, 7-23, 7-24, 7-27, 7-28, 7-34 to 7-36, 8-1, 8-9 to 8-16, 8-20, 8-21 Level-of-service score (LOS score), 1-15, 1-16, 2-8, 2-9, 5-8, 5-10, 5-12 to 5-15, 7-7, 8-12, 8-13

Level terrain, 3-20

Link, 1-2, 1-16, 2-16, 4-27, 5-11 to 5-13, 6-10, 6-17, 6-20, 6-23, 6-24, 7-7, 7-11, 7-19, 7-20, 7-26, 7-30, 7-32

Link length, 6-23

Loading area, 4-39, 4-43, 4-44 Local street, 1-18, 2-17, 8-19

Lost time, 4-14, 4-16, 4-17, 4-39, 4-43, 6-10

M

Macroscopic model, 6-10, 6-21, 6-23, 8-16 Mainline, 3-15, 4-25 Major street, 4-17 to 4-19, 4-24, 5-14, 8-21 Managed lane, 1-1, 1-6, 1-8, 1-11 to 1-14, 4-25, 8-20 Median, 1-12, 1-17, 3-13, 3-19, 3-35, 5-8, 5-9, Median U-turn intersection (MUT), 1-12, 1-17 Meeting, 2-9, 2-10, 3-27, 3-30, 4-10, 5-16, 7-10, 7-12, 7-39, 8-7, 8-8, 8-13, 8-21 Merge, 1-6, 1-14, 2-6 to 2-8, 2-18, 6-10, 6-12, 6-14, 6-20, 7-10, 7-11, 7-15, 7-28, 7-32, 8-4, 8-5 Mesoscopic model, 6-7, 6-17 Microscopic model, 6-7, 6-10, 6-17, 6-21, 6-23, 6-24, 8-16 Minimum green, 3-15, 8-8 Minor movement, 4-19 Minor street, 4-17, 4-19, 4-24, 8-21 Mobility, 1-1, 1-2, 2-17, 3-32, 4-29, 4-33, 5-11, 7-23, 8-9

Mode, 1-5, 1-12, 2-1, 2-2, 2-7 to 2-9, 2-11, 2-12, 2-17, 3-1, 3-2, 3-15, 3-17, 3-20, 3-22 to 3-27, 3-29 to 3-32, 3-34, 4-1, 4-2, 4-22, 4-28, 4-37, 4-39, 5-1, 5-5, 5-8 to 5-15, 6-5, 6-12, 6-21, 6-23, 6-32, 6-33, 7-5, 8-4, 8-7, 8-8, 8-11, 8-13, 8-19, 8-21 Model, 1-12, 1-17, 2-3, 2-4, 2-8, 2-9, 2-17, 3-3, 4-13, 4-21, 4-26, 4-27, 5-2, 5-4, 5-8 to 5-10. 5-12 to 5-15, Chapter 6, Chapter 7, 8-7, 8-9, 8-11 to 8-17 Model application, 6-6, 6-7 Motorized vehicle mode, 2-11, 4-1, 5-9, 5-12, 5-14, 8-1 Multilane highway, 1-6, 1-11, 1-14, 2-7, 2-8, 2-13, 3-15, 3-17, 4-8, 4-24, 5-10, 5-12, 6-16, 7-14, 8-4, 8-5, 8-12, 8-13, 8-15 Multilane roundabout, 6-12 Multimodal, 1-1, 1-2, 1-4, 1-7, 2-1, 2-8, 2-9, 2-17, 3-1, 5-2, 5-5, 5-10, 5-12, 5-16, 6-1, 6-12,

N

Near-side stop, 4-39, 4-44 Node, 6-3, 6-17, 6-20, 6-27, 6-33, 7-24 No-passing zone, 6-21 Normative model, 6-8, 6-9

6-30, 7-5, 7-39, 8-1, 8-6, 8-13

0

Off-ramp, 1-6, 6-21, 6-23, 8-4
Offset, 4-17, 6-12
Off-street, 1-1, 1-7, 2-8, 2-9, 2-12, 3-25, 3-29, 3-30, 4-37, 5-10, 5-15, 8-1, 8-6 to 8-8, 8-12, 8-13
On-ramp, 1-6, 6-21, 8-4
On-time arrival, 4-10
Operational analysis, 1-12, 2-1, 2-3, 2-5, 3-9, 6-13, 6-15, 8-14
Outputs, 1-1, 2-16, 5-4, 6-1, 6-2, 6-4, 6-6, 6-13, 6-22, 6-27, 7-3, 7-5, 7-6, 7-8, 7-32, 8-17
Oversaturated flow, 4-7, 4-8, 6-12

P

Partial stop, 7-13
Passenger car, 1-14, 2-11, 3-2, 3-3, 3-14, 3-16 to 3-18, 3-20, 4-5, 4-13, 4-22 to 4-24, 4-39, 7-27, 7-31, 8-2 to 8-5
Passenger car equivalent (PCE), 7-31
Passenger service time, 4-39 to 4-43
Passing lane, 8-5
Peak hour, 1-16, 1-17, 3-5, 3-8, 3-10, 3-12, 3-13, 3-23, 3-28, 4-3, 4-4, 4-9, 7-6
Peak hour factor (PHF), 1-16, 1-17, 4-3, 4-4, 4-38, 4-44, 6-4, 6-32, 6-33, 7-6 to 7-8, 7-32

Pedestrian, 1-1, 1-4, 1-7, 1-10, 1-11, 1-15 to 1-17, 2-1, 2-4, 2-7 to 2-9, 2-11, 2-13, 2-17, 3-1, 3-15, 3-21 to 3-27, 3-29 to 3-31, 3-35, 3-37, 4-1, 4-22, 4-28 to 4-37, 4-39, 4-41, 4-45, 4-46, 5-1, 5-2, 5-8, 5-10, 5-12 to 5-16, 6-5, 6-12, 6-18, 6-19, 6-21, 7-5, 7-7, 7-10, 8-1, 8-6 to 8-10, 8-12, 8-13, 8-15 Pedestrian crosswalk, 3-25, 4-29 Pedestrian density, 2-9, 4-30, 5-12, 8-13 Pedestrian flow rate, 4-35 Pedestrian mode, 2-11, 4-1, 6-18 Pedestrian queuing area, 2-4, 8-15 Pedestrian space, 4-29, 4-30, 5-15, 8-7, 8-8 Pedestrian start-up time, 4-29 Pedestrian walkway, 2-7, 3-24 Pedestrian zone, 3-22, 3-24 Percent of free-flow speed, 5-11 Percent time-spent-following, 2-8, 2-18, 5-2, 5-11, 7-10, 7-28, 8-5 Performance measure, 1-1 to 1-4, 1-12, 1-13, 1-15, 1-17, 2-2, 2-7, 2-8, 2-11, 2-17, 3-1, 3-27, 4-1, 4-10, 4-19, 4-22, 4-27, 4-38, Chapter 5, 6-1, 6-2, 6-5, 6-11, 6-12, 6-17, 6-18, 6-22, 6-28, 6-29, Chapter 7, 8-1, 8-2, 8-5, 8-7, 8-9, 8-11 to 8-13, 8-16 to 8-18, 8-20 Person capacity, 4-1, 4-21, 4-22, 4-43, 4-44, 8-4 Phase, 2-14, 3-16, 3-35, 3-37, 4-20, 6-12, 7-12 Planning and preliminary engineering analysis, 2-1, 2-3, 2-4, 6-2, 6-32, 8-14, 8-15 Planning time index, 4-11, 7-12 Platoon, 2-14, 4-12, 4-35 to 4-37, 5-11, 8-5, 8-6 Point, 1-2, 1-4, 1-8, 1-16, 1-18, 2-1, 2-3, 2-6 to 2-8, 2-12 to 2-14, 3-1, 3-5, 3-12, 3-32, 4-1, 4-2, 4-5, 4-6, 4-8, 4-11, 4-13 to 4-15, 4-18, 4-21, 4-26 to 4-28, 4-33, 4-34, 4-39, 5-1, 5-4, 5-5, 5-7, 6-3, 6-9, 6-12, 6-16, 6-20, 6-23, 6-28, 7-3, 7-5, 7-9, 7-12, 7-15, 7-16, 7-20, 7-21, 7-23, 7-25, 7-27, 8-2 to 8-4, 8-9, 8-11, 8-18,

Precision, 1-5, 2-3, 2-4, 7-1, 7-4, 7-8, 7-9, 7-39, 8-11, 8-15, 8-17, 8-18
Pretimed control, 6-21
Prevailing condition, 4-1, 4-6, 4-21, 4-22, 7-4, 8-2

Progression, 1-16, 3-34, 6-10

0

Quality of service, 1-1, 1-4, 1-5, 2-1, 2-5, 2-11, 2-12, 3-2, 3-15, 3-22, 3-23, 3-25 to 3-27, 3-30, 3-31, 4-1, 4-25, 4-37, 4-38, Chapter 5, 6-18, 8-1, 8-9, 8-10, 8-17, 8-20 Quantity of service, 2-9, 2-10, 8-9 Queue, 1-16, 2-14, 2-15, 3-14, 3-35, 4-3, 4-7, 4-9, 4-14 to 4-17, 4-19 to 4-22, 4-24, 4-27, 4-35, 4-37, 4-41, 4-42, 5-5, 5-6, 5-9, 6-10 to 6-12, 6-18, 6-24, 7-10 to 7-14, 7-16 to 7-18, 7-20, 7-21, 7-23 to 7-26, 7-32, 7-34 to 7-38, 8-2, 8-6, 8-7, 8-12, 8-16 Queue delay, 7-24 to 7-26 Queue discharge flow, 2-15, 4-7 Queue jump, 4-41 Queue length, 3-14, 4-20, 4-21, 5-5, 7-13, 7-16, 7-17, 7-20, 7-21, 8-7, 8-12 Queue spillback, 1-16, 6-12 Queue storage ratio, 7-13 Queued state, 7-24 to 7-26 Queuing area, 3-24, 4-1, 4-36

R

Ramp, 1-7, 1-8, 1-17, 2-4, 2-6, 2-8, 2-13, 2-15, 2-16, 2-18, 3-15, 3-22, 3-25, 4-25, 5-10, 6-8, 6-10, 6-12, 6-13, 6-18, 6-19, 6-21, 6-23, 6-26, 7-6, 7-7, 7-10, 7-11, 7-13 to 7-15, 7-28, 7-32, 7-35, 8-4, 8-6, 8-12, 8-15 Ramp meter, 2-4, 2-13, 2-15, 4-25, 6-8, 6-12, 6-13, 6-19, 8-4, 8-15 Reasonable expectancy, 4-1, 4-22, 8-2 Recreational vehicle (RV), 2-1, 2-11, 3-2, 3-17 to 3-19, 4-23, 5-9, 8-1 Reentry delay, 4-39, 4-41, 4-44 Reliability rating, 4-11, 4-12, 7-12 Residual queue, 2-14, 2-15, 6-10, 7-21, 7-35 to Restricted crossing U-turn intersection (RCUT), 1-12, 1-17 Right-of-way, 1-2, 2-7, 2-13, 3-1, 3-25, 3-30, 3-34, 3-35, 4-18, 4-24, 5-10, 8-6, 8-8 Right-turn-on-red, 1-16, 6-10 Roadway characteristic, 7-22 Roadway occupancy, 4-6 Roundabout, 1-7, 1-12, 1-16, 1-17, 2-8, 2-13, 2-14, 3-15, 4-5, 4-18, 4-19, 5-10, 5-14, 6-12, 6-20, 7-13, 7-23, 7-24, 8-1, 8-6, 8-12, 8-20 Rubbernecking, 4-14 Running speed, 4-5, 4-39, 4-40, 7-11, 7-24, 7-26 Running time, 2-18, 4-5, 7-10 Rural, 1-18, 3-5 to 3-8, 3-10 to 3-13, 3-17, 3-19, 4-11, 4-23, 4-24, 5-8, 5-11, 5-16, 6-7, 6-18, 6-21, 8-1, 8-19

S

Saturation flow rate, 4-14, 4-16, 4-17, 4-20, 4-21, 4-23, 4-25, 4-38, 6-20, 7-4 Saturation headway, 4-15 to 4-18 Scenario, 1-12, 1-13, 1-19, 4-2, 4-5, 4-7, 4-21, 4-41, 5-8, 6-1, 6-6, 6-9, 6-13, 6-27, 7-27 Scenario generation, 1-13 Section, 1-7, 2-17, 3-6, 3-12, 5-10, 5-11, 6-27, 7-27, 8-2, 8-6, 8-7 Segment, 1-4, 1-6, 1-13 to 1-16, 2-1, 2-3, 2-6 to 2-10, 2-12 to 2-15, 2-17, 3-6, 3-7, 3-12, 3-15, 3-32, 4-1, 4-4 to 4-8, 4-13, 4-22, 4-26, 4-37, 5-10 to 5-12, 6-3, 6-6, 6-12, 6-14 to 6-16, 6-23, 6-26, 6-32, 6-33, 7-5, 7-6, 7-11 to 7-25, 7-27, 7-28, 7-31, 7-32, 7-34, 7-38, 8-4, 8-6, 8-13, 8-15 Segment delay, 2-8, 2-9, 7-14, 7-23 to 7-25, 7-38 Sensitivity analysis, 6-33, 7-3, 7-5, 7-6, 7-8, 8-17 Service flow rate, 2-3, 4-22 to 4-24 Service measure, 1-5, 1-15, 1-18, 2-2, 2-8, 2-18, 3-1, 4-5, 4-19, Chapter 5, 6-3, 6-33, 6-34, 7-2 to 7-4, 7-7, 7-10, 7-34, 8-9, 8-10, 8-12, 8-19, 8-20 Service time, 4-19, 4-40, 4-42 Service volume, 1-1, 1-14, 2-5, 6-1, 6-3, 6-4, 6-33, 6-34, 7-6, 7-7, 8-15 Severe weather, 1-6, 1-7, 4-9, 4-19, 7-12, 8-3 Shared-use path, 1-7, 3-24, 3-25 Shock wave, 4-27, 6-20, 7-12 Shoulder, 3-13, 3-14, 3-30, 3-31, 4-13, 4-23, 4-28, 4-37, 5-10, 5-13, 7-6, 8-2, 8-3 Shy distance, 4-37 Side street, 4-20, 5-12, 8-7 Sidepath, 3-30 Sidewalk, 2-4, 2-9, 3-22 to 3-24, 3-26, 3-32, 4-32 to 4-36, 4-41, 5-8, 5-12, 5-13, 7-7, 8-8, 8-13, 8-15 Signal priority, 3-16, 4-41 Simulation, 3-27, 4-26, 4-27, Chapter 6, Chapter 7, 8-11, 8-16, 8-17 Single-unit truck, 2-1, 3-8, 3-14, 3-17, 3-19, 3-20, 6-24 Sketch-planning tool, 6-3, 6-7 Space, 2-7, 2-8, 2-11, 3-2, 3-12, 3-15, 3-17, 3-22, 3-24, 4-4 to 4-7, 4-13, 4-14, 4-17, 4-23, 4-25 to 4-28, 4-30 to 4-33, 4-35 to 4-37, 4-39, 4-40, 4-42, 4-44, 4-46, 5-15, 6-11, 7-13 to 7-15, 7-19, 7-20, 7-24, 7-35, 7-38, 8-2, 8-12, 8-16 to 8-18 Space gap, 4-17 Space mean speed, 4-4, 4-5, 4-7, 7-14, 7-20 Spacing, 1-17, 2-3, 4-2, 4-6, 4-13, 4-34, 4-39, 6-32, 7-24, 7-27, 8-14 Spatial stop rate, 4-10 Spatial variability, 7-3 Special event, 1-6, 1-7, 1-12, 3-7, 3-10, 4-9, 6-8

Speed, 1-5, 1-13, 1-14, 2-5, 2-8 to 2-18, 3-2, 3-4, 3-5, 3-13 to 3-17, 3-20, 3-22, 3-24 to 3-27, 3-30, 3-31, 3-34, Chapter 4, 5-2, 5-8 to 5-15, 6-7, 6-12, 6-18, 6-20, 6-21, 6-24, 6-29, 7-2, 7-5 to 7-7, 7-9 to 7-12, 7-14, 7-15, 7-19, 7-21 to 7-25, 7-30, 7-38, 8-2, 8-4, 8-5, 8-7 to 8-9, 8-12, 8-13 Speed adjustment factor (SAF), 1-13, 1-14 Spillover, 4-32, 4-36 Split, 3-17, 3-27 Stairway, 3-24, 3-25, 4-33, 4-34 Start-up lost time, 4-16, 6-10 Static flow model, 6-8 Stochastic model, 6-7, 6-28, 8-16 Stop rate, 2-18, 4-19, 7-10 Stop spacing, 3-34, 4-39, 4-40 Stopped delay, 4-4, 7-22, 7-24, 7-25 Stopped state, 7-22, 7-25 Storage length, 4-20, 7-13, 8-7 Street corner, 4-36 Study period, 4-20 Subject approach, 4-18 Sustained spillback, 1-15, 1-16 System, 1-1, 1-2, 1-4, 1-12, 1-13, 2-4, 2-7, 2-10, 2-17, 3-15, 3-22, 3-32, 3-33, 3-37, 3-38, 4-6, 4-20, 4-25, 5-9, 6-1 to 6-9, 6-11 to 6-13, 6-17, 6-18, 6-21, 6-22, 6-28, 6-29, 6-33, 7-2, 7-4, 7-19, 7-27, 7-30, 7-31, 7-35 to 7-38, 8-9, 8-13, 8-14, 8-16 System element, 1-5 to 1-7, 1-14, 2-1, 2-2, 2-6, 2-8, 2-9, 3-3, 4-1 to 4-3, 4-19, 4-21 to 4-24, 4-38, 5-1, 5-2, 5-3, 5-5, 5-7, 5-10, 6-2 to 6-4, 6-13, 6-18, 6-33, 7-5, 7-10, 7-13, 7-21, 7-38, 8-2, 8-6, 8-7, 8-10, 8-12, 8-17, 8-20

T

Target speed, 7-22 to 7-25, 7-27 Temporal variability, 7-3, 7-4 Terrain, 4-23, 4-37, 6-12, 6-32 Threshold delay, 4-13, 4-19 Through vehicles, 1-15, 4-19, 4-20, 7-8, 7-11, 7-32, 8-7 Throughput, 4-12, 4-25, 4-36, 6-29, 7-34 Time gap, 4-17 Time interval, 4-2, 4-17, 4-18, 4-35, 7-12, 7-19 Time mean speed, 4-5 Time-space, 4-26, 4-27 Time step delay, 7-25 Tool, 1-1, 1-2, 1-5, 1-9, 1-18, 1-19, 2-1, 2-2, 2-4, 2-5, 2-8, 2-16, 2-17, 3-1, 4-1, 4-27, 5-1 to 5-4, 5-6, Chapter 6, Chapter 7, 8-1, 8-2, 8-8, 8-9, 8-15 to 8-17, 8-19 to 8-21 Total lost time, 4-17 Total ramp density, 7-6, 7-7 Traffic analysis tool, 1-19, 6-2, 6-5, 6-6, 6-19, 6-20, 6-25, 6-26, 7-14, 7-15, 7-19, 7-22, 7-31, 7-35, 8-16, 8-20

Traffic composition, 3-13, 6-20, 6-21, 6-23, 6-25

Traffic condition, 2-16, 3-11, 4-2, 4-5, 4-9, 4-18, 4-23, 4-24, 5-7, 6-6, 6-9, 6-19, 6-21, 6-23, 6-24, 7-23, 8-2, 8-3, 8-5

Traffic control device, 1-7, 1-18, 2-1, 2-3, 2-6, 2-8, 3-22, 4-5, 4-19, 4-27, 5-12, 7-11, 7-26, 8-7, 8-19

Traffic delay, 4-19, 4-42

Traffic signal delay, 4-39

Traffic signal optimization tool, 6-7

Transit mode, 1-7, 2-11, 2-12, 3-2, 3-34, 4-1, 7-5

Transit signal priority, 4-41, 8-8

Transition, 4-7, 5-9

Transitway, 3-35

Travel demand model, 6-1, 6-7

Travel mode, 1-2, 1-4, 1-5, 1-7, 2-1, 2-2, 2-8, 2-11, 3-1, 3-15, 4-1, 6-11, 7-4, 8-1, 8-2, 8-10, 8-12, 8-20

Travel speed, 1-15, 2-14, 3-32, 4-4, 4-5, 4-10, 4-13, 5-10 to 5-12, 7-11, 8-2, 8-5

Travel time, 1-1, 1-2, 1-5 to 1-8, 1-11 to 1-13, 1-15 to 1-17, 2-8, 2-10, 2-16, 2-18, 3-3, 3-4, 3-20, 3-32, 4-1, 4-4, 4-5, 4-9 to 4-13, 4-18, 4-19, 4-25, 4-38, 4-39, 4-41, 4-42, 5-2, 5-11, 5-14, 6-1, 6-7, 6-8, 6-9, 6-28, 6-29, 7-2, 7-3, 7-10 to 7-12, 7-14, 7-19, 7-20, 7-23, 7-25, 7-26, 8-2, 8-5, 8-7, 8-9, 8-20

Travel time distribution, 4-9 to 4-12, 6-1, 7-12, 7-26

Travel time index, 4-11, 4-12, 7-12, 7-23

Travel time rate, 4-4

Travel time reliability, 1-1, 1-2, 1-5 to 1-8, 1-11 to 1-13, 2-10, 3-4, 4-1, 4-9, 5-2, 6-1, 6-9, 7-2, 7-3, 7-10, 7-12, 7-23, 7-26, 8-2, 8-5, 8-7, 8-9, 8-20

Traveler perception model, 2-8, 2-9, 7-5, 8-7, 8-11, 8-12, 8-13

Truck, 1-12 to 1-14, 2-1, 2-11, 2-13, 2-16, 3-1 to 3-3, 3-8, 3-14 to 3-21, 3-31, 3-35 to 3-37, 4-22 to 4-24, 5-9, 5-10, 5-13, 6-19, 6-21, 7-3, 7-6, 7-26, 8-1 to 8-4, 8-8

Turn lane, 2-9, 4-17, 4-20, 4-41, 5-12, 8-7, 8-13, 8-21

Turning movement, 3-14, 3-15, 3-35, 6-26, 7-32, 8-6, 8-8

Turnout, 2-4, 8-5

Two-lane highway, 1-6, 1-12, 1-15, 2-7 to 2-9, 2-13, 3-13, 3-15, 4-4, 4-23, 5-7, 5-11, 5-12, 6-16, 7-5, 7-28, 8-4, 8-5, 8-12, 8-13, 8-15

Two-way STOP-controlled (TWSC), 1-7, 2-6, 2-18, 4-17, 4-18, 4-24, 5-10, 5-14, 6-12, 6-18, 7-10, 8-6

U

Uncertainty, 5-4, 6-4, 6-7, 7-1, 7-3 to 7-5, 7-8, 7-39, 8-11, 8-17
Uncontrolled, 2-6
Undersaturated flow, 2-13, 2-14, 4-5, 4-7
Uniform delay, 6-10, 7-26
Uninterrupted flow, 2-13, 4-2, 4-14, 8-2, 8-4
Unit extension, 6-10

Unsignalized intersection, 2-15, 3-4, 3-15, 3-22, 3-26, 4-17, 4-19, 5-13, 5-14, 6-15, 7-5, 7-13, 7-14, 8-6

Urban, 1-8, 1-15, 1-18, 2-18, 3-1, 3-6 to 3-15, 3-17, 3-19, 3-21, 3-37, 4-32, 4-36, 4-46, 5-8, 5-16, 6-12, 7-7, 7-10 to 7-13, 7-30, 7-32, 7-39, 8-8, 8-19

Urban street, 1-4, 1-7, 1-11, 1-12, 1-16, 2-1, 2-6 to 2-9, 2-12, 2-13, 2-17, 3-7, 3-9, 3-10, 3-13 to 3-15, 3-17, 3-19, 3-21, 3-37, 4-4, 4-9 to 4-11, 4-39 to 4-41, 4-43, 5-9, 5-10, 5-12 to 5-14, 6-14, 6-15, 6-17, 6-18, 6-21, 7-5, 7-12, 7-32, 8-1, 8-2, 8-6, 8-7, 8-10, 8-12, 8-13, 8-15

Urban street facility, 1-4, 2-7 to 2-9, 2-12, 4-9, 4-43, 5-10, 7-5, 7-12, 8-12, 8-13

Urban street segment, 1-7, 1-16, 2-7 to 2-9, 5-10, 5-14, 8-6, 8-12, 8-13

User perception variability, 7-3 Utility, 3-3, 3-18, 3-27, 4-13, 4-38, 5-8, 6-26, 6-29, 8-1

U-turn, 8-6

V

Validation, 6-6, 6-19, 6-23, 6-25 to 6-27 Variability, 2-10, 2-11, 3-28, 3-29, 4-4, 4-9, 4-10, 4-42, 5-4, 6-4, 6-7, 7-1, 7-3, 7-4, 7-11, 7-12, 7-28 to 7-30, 8-11, 8-14, 8-17

Vehicle trajectory analysis, 6-2, 7-1, 7-2, 7-15, 7-26, 7-31, 7-34

Verification, 6-6, 6-20, 6-25, 6-30

Volume, 1-1, 1-10, 1-16, 2-4, 2-7, 2-9, 2-10, 2-14, 2-17, 2-18, 3-5 to 3-13, 3-15, 3-16, 3-22 to 3-30, 3-35, 4-1 to 4-5, 4-14, 4-18, 4-24, 4-29, 4-32, 4-33, 4-38 to 4-41, 4-44, 5-3, 5-9, 5-10 to 5-15, 6-1 to 6-4, 6-6, 6-10, 6-25 to 6-27, 6-32 to 6-34, 7-1, 7-3, 7-4, 7-6 to 7-8, 7-10, 7-12, 7-15, 7-25, 7-29 to 7-32, 7-36, 7-38, 8-2, 8-3, 8-5, 8-7, 8-8, 8-10, 8-11, 8-13, 8-15, 8-17, 8-21

Volume balance, 1-16

Volume-to-capacity (v/c) ratio, 2-10, 2-18, 4-39 to 4-41, 5-9, 7-10, 8-5

W

Walkway, 1-7, 2-4, 3-22, 3-24, 3-25, 4-29 to 4-34, 4-36, 8-15 Weaving, 1-6, 1-8, 1-14, 2-17, 2-18, 4-40, 5-10, 6-12, 6-14, 6-18, 6-21, 7-5, 7-10, 7-11, 7-15, 7-35, 8-4 Weight-to-power ratio, 3-17 Work zone, 1-1, 1-2, 1-6, 1-7, 1-12, 1-13, 1-16, 2-13, 4-9, 6-22, 7-11, 7-12, 8-2

