INDEX

Refer to the page numbers listed for primary information related to the subjects/topics below. These subjects also may be addressed secondarily on other pages of the toolbox.

access to transit: Toolbox Section 6
access management 2-11 to 2-13
accessible building entrances 3-31 to 3-33
accessible pedestrian signals (APS) 3-20 to 3-27
accessible routes of travel 3-31 to 3-34
accessibility: Toolbox Section 3

clear travel area at intersections 5-33
clearances 3-10
cross slopes 3-12
crosswalks 3-12
curb ramps (sidewalk) 3-14 to 3-16
driveways, across 3-29
eliminating barriers and obstacles 3-10
medians/refuge islands 3-13
passing areas 3-11
program requirements 3-6
project planning 3-1
shared use paths: Toolbox Section 7
sidewalks and curb ramps 3-14, 3-32 to 3-34
signing and other communication aids 3-27 to 3-29
surfacing treatments 3-17 to 3-19
textural and visual cues 3-17 to 3-19
(shared use paths) trails and pathways 7-5 to 7-6
widths and clearances 3-10
advance warning signs:
in school zones; prior to school bus stops 8-13
prior to intersections and mid-block crossings 5-32 to 5-33
advisory group/reviewers 10-25
aids to pedestrians:
older pedestrians G-11, 3-5
people with disabilities: G-13, 3-5
Americans with Disabilities Act (ADA) (also see accessibility): Toolbox Section 3
APS integrated push buttons 3-20 to 3-27
artwork, public art 9-14
barriers and obstacles (eliminating them) G-4, 3-10
beach access 7-22 to 7-24
bicycle facilities 2-19 to 2-21
bicycle lanes (as separation) 2-8
bicycle parking 2-21
bicycles on sidewalks 4-23
bicycle-friendly design 9-17
bicycle use adjacent to and within pedestrian realm 4-32 to 4-35
boardwalks 7-23
bollards 4-30, 7-14
bridges (see overpasses and bridges)
building frontage zone (of sidewalk) 4-17
building location and design
bus shelters, bus stops/zones (see transit stops)
classifications (roadways/streets) 2-2
clear zone requirements 4-14
climate change P-7
colored paving (colored/textured) 7-11
complete streets 2-2
concrete barriers 4-35
connectivity 1-8, 1-14
context/setting 1-2, 1-5 to 1-7, 4-3
covered walkways in work zones 11-2
crashes/collisions/accidents P-5, G-6 to G-8,
common characteristics of G-8
common types of collisions involving children (aged K-6) P-5
fatalities (based on speed of vehicle) G-7
pedestrian injuries and deaths at impact speeds 8-15
statistics for children, older adults P-5

cross slopes 3-12
crossing distance (reducing/minimizing) 5-2, 5-17
at intersections (crossing distance related to speed and time) 5-2, 5-9
curb bulb-outs/extensions 2-10, 5-17 to 5-19
medians and center refuge islands 5-19
right-turn channelization/refuge island (slip lane) 5-20 to 5-23
skewed and multiple intersections 5-17
curb return radius shortening 5-22 to 5-24
crossing guards/student patrols at crossings 8-16 to 8-18
crossings (also see crosswalks):
  boardwalks 7-23
determining the need for crossing improvements at intersections 5-2
fencing, barriers, signs, landscaping, etc.
to channelize pedestrians 5-33, 5-41
flashing beacons at mid-block 5-28, 5-41
to 5-42
grade separated crossings 5-36 to 5-37
lighting at intersection 5-16
lighting at mid-block 2-28
marked crosswalks at mid-block 5-31
medians and center refuge islands at markings 5-29 to 5-31
mid-block crossings 5-26 to 6-33
overpasses and bridges 5-36 to 5-38
portable pedestrian flags at 5-42 to 5-43
raised mid-block crossings 5-31
signing 5-31 to 5-33
underpasses and tunnels 5-37
crosswalks: Toolbox Section 5, I-3, G-7, 1-3, 3-12 to 3-13
accessibility of 3-12
at signalized locations 5-2, 5-6 to 5-16
closures of during construction 11-3
determining the need for 5-2
dimensions of 5-2, 5-4
maintenance of 11-7
marked, at mid-block crossings 5-26
marked crosswalks vs. unmarked 5-2
markings/striping 5-2 to 5-6
  rumble strips 5-5
  signization 5-6 to 5-15
types of 5-6
stop bars, advance stop bars 5-4 to 5-5
stop-controlled crosswalks in school
areas 8-12 to 8-13
cul-de-sac street closures 2-17, 8-4, 9-15 to 9-17
curbings 4-35 to 4-37
curb and gutter/vertical curb 4-36
extruded curbing (strongly discouraged) 4-36
rolled curbing (strongly discouraged) 4-36
curb extensions/bulb-outs (chokers, neck-downs) 5-17 to 5-19
as traffic calming tools 5-17 to 5-19
at intersections 5-17 to 5-19
curb radius reduction/shortening 5-24
curb ramps (sidewalk curb ramps) 3-14 to 3-16
curb ramps at intersections 3-14, 5-6
dependence on fossil fuels P-6
detectable warning strips 3-17 to 3-19
diagonal diverters (traffic calming device) 2-16
dimensions of
  accessible facilities 7-7, 7-9
  building frontage zone (of sidewalk) 4-17
crosswalks 3-12, 5-2, 5-4
curb radii 5-22, 5-25
curb ramps (sidewalk) 3-15
handrails 3-8, 3-33, 3-34
medians and refuge islands 3-13 to 3-14, 5-29
on-street parking setbacks 2-10
parking overhangs 2-10
passing, waiting and resting areas 3-11
pavement cross sections for trails 7-10
pedestrian through zone 4-18
planting buffers/planting zones 4-18, 4-21, 4-23
railings 4-39
school bus stops 8-7 to 8-10
separation between road and shared use pathway 7-9
sidewalks and walkways: Toolbox Section 4
shoulders 4-12 to 4-13, 7-11
spatial dimensions of pedestrians G-8 to G-10, 3-4
speed humps 2-17, 5-32
street crossing distance G-4
stairway/steps treads and risers 9-12 to 9-13
traffic circles 2-15
shared use paths Toolbox Section 7
transit stops Toolbox Section 9
underpasses 5-37
ditches/swales (as separation treatments) 4-16
drainage grates/utility covers 4-24
driveways/driveway design:
access management and driveways 9-10
considerations related to accessibility 3-29, 3-30
wide planting areas, at 9-10, 9-12
driveway design comparisons 9-10
dual turning movements at intersections 5-35
drive, curb zone 4-21
edge/separation treatments:
bicycle lanes as separation 2-8
congestion (New Jersey) barriers 4-35
curb and gutter/vertical curb 4-36
discourage edge treatment 4-36
ditches/swales as separation 4-15
education 10-1, 10-2
educational training; outreach tools and strategies 10-12
effective turning radius 5-25 to 5-26
encouragement 10-1, 10-24
media campaigns 10-24
other tools and strategies 10-25
enforcement, 10-1, 10-12
targeted behaviors 10-12
enforcement campaigns and programs 10-12 to 10-24
engineering: Toolbox Sections 2 through 9, 10-15
equity 10-1, 10-29
evaluation 10-1, 10-28
extension zone 4-21
extruded curb/curbing 4-36
fatalities (for pedestrians, based on vehicle speeds) P-3, P-5, G6 to G-7
fixtures/planting zone (see furnishings zone)
fencing, barriers, signs, landscaping to channelize pedestrians at mid-block crossings 5-33, 5-41
flushing beacons:
mid-block locations, at 5-28, 5-41
to 5-42
school crossings, at 8-6
forecasting pedestrian use/travel G-6
forced turns and partial diverters (traffic calming devices) 2-16
full street closure (as a traffic calming technique) 2-17
furnishings zone 4-19 to 4-21
gradients/grades (cross slope and longitudinal) 4-23
grade separation/grade separated crossings 5-35 to 5-37
determining the need for 5-36
green streets 2-5, 2-6
greenhouse gas emissions P-7
handrails 3-8, 3-33 to 3-34
health crisis P-4, -20
highways as "main streets" 1-21, 4-11
historic and scenic highway 4-15
horizontal clearance 4-23, 4-24
how-to guides 10-5
innovative techniques:
  portable pedestrian flags 5-42
  PUFFIN and PELICON devices 5-41 to 5-42
  soft sandwich signs 5-40
interchanges (freeway) and expressway ramps 5-35 to 5-36
intersections and crossings: Toolbox Section 5
  basic principles of intersection design to accommodate pedestrians 5-1 to 5-2
  crosswalk dimensions 5-2
  crosswalk markings, at 5-3 to 5-5
  curb bulb-outs and extensions 5-17 to 5-19
  curb ramps, at 5-6
  curb return radius 5-22 to 5-26
  effects of pedestrian improvements on vehicle capacity at 5-43
  grade separation 5-35 to 5-37
  lighting at 2-2, 5-16
  medians and center refuge islands 5-19
meandering sidewalks and walkways 4-28
medians and refuge islands:
  design guidelines for 5-29
  intersections, at 5-19 to 5-22
  mid-block crossings, at 5-29 to 4-31
  traffic calming benefits of 2-17
mid-block crossings 5-26 to 5-33
  advanced warning and pedestrian signs 5-32
  crossing signs, at 5-28
design of 5-27 to 5-29
determining the need for 5-26 to 5-27
  fencing, barriers, signs, landscaping, sidewalk ramps to channelize pedestrians at 5-33
  flashing beacons at 5-28, 5-41
to 5-42, 8-6
  marked crosswalks at 5-28
  medians and refuge islands at 5-28 to 5-31
  on-street parking setbacks 5-34
  pedestrian actuated signals at 5-32
  PUFFIN and PELICON devices at 5-41 to 5-42
  raised crossings, at 5-31
  signals/signalization/signing 5-31 to 5-33
  soft sandwich, at 5-40
minimizing crossing distances 5-17 to 5-26
minimizing pedestrian/motor vehicle conflicts at 5-33
shared use paths 7-14 to 7-16, 7-25
right-turn lanes/slip lanes 5-20 to 5-22
signals/signalization 5-6 to 5-15
signs related to pedestrian crossings at stop bars, advance stop bars, at 5-4 to 5-5
ladder bar crosswalk markings 5-2 to 5-4
landings 9-13
lighting (see also street lighting)
  accessibility requirements 3-34
  along streets sidewalks 2-26 to 2-29
district/neighborhood identity 2-28
  intersections, at 2-2, 5-16 to 5-17
  mid-block crossings, at 2-28
  along shared use paths 7-26
livability P-1
longitudinal grades 3-7
maintenance: Toolbox Section 11
  in school zones 8-19
  in work zones 11-1
  of shared use paths 7-26
  of sidewalks and walkways 4-40
marked crosswalks (see crosswalks)
speed humps (raised crossings), at 5-31 to 5-32
street lighting at mid-block 2-15
visibility and sight distance 5-33
where and where not to locate 5-28
mixed use development 9-4, 9-18 to 9-20
benefits of 9-18 to 9-19
checklist for successful mixed use 9-18
multiple and skewed intersections (avoiding and reconfiguring) 5-17
multi-use paths/trails (see shared use paths)
narrowed streets (traffic calming approach) 2-17
needs of pedestrians P-2 to P-7, G-1, G-5, 1-2
neighborhood gateways (traffic calming approach) 2-18
neighborhood traffic calming/management 2-15
New Jersey concrete barriers 4-35
older adults G-9 to G-10, 3-5
on demand training 10-5
on-site circulation and parking 9-2 to 9-12
one-time instruction 10-4
one-way entry/exit (traffic calming device) 2-17
overhead crossings (see overpasses and bridges) 5-36 to 5-37
overhead signs at crossings 5-31
parking along streets (as buffer for pedestrians)
parking setbacks (on-street) 2-10
park-and-ride facilities (access to) 6-18
partial street closures/diverters 2-16
partnerships 10-4
passing, waiting, and resting areas 3-11
pathways (see shared use paths)
pavement texture and pattern options 4-11
paving and surfacing:
  color/reflection 4-27
  sidewalks/walkways 4-25 to 4-27
  shared use paths 7-11
thickened-edges along shared use paths 7-24 to 7-25
thinking about pedestrians from the start:
  Toolbox Section 1
pedestrians P-1 to P-7, G-1 to G-13
  about pedestrians/characteristics of P-1
defined P-1
  needs of G-1, G-2
    older adults G-9, G-11
    younger adults G-10, G-11
  reasons for travel G-1
trip lengths G-3
types of trips G-2, G-3
with disabilities G-11, G-13, 3-4
  spatial considerations/needs G-8, G-9,
G-10, 3-4
pedestrian access routes 3-7
pedestrian access to transit (see transit, pedestrian access to)
pedestrian actuated signals/actuators:
  at intersections 5-13
  at mid-block 5-13
crossing distances, speeds and times 5-9, 5-13 to 5-14
  signal timing/WALK signal timing 5-9 to 5-12
pedestrian advisory and advocacy groups 10-25
pedestrian characteristics by age group G-9 to G-10
pedestrian comforts and support facilities 1-3
pedestrian detectors 5-6 to 5-15
pedestrian detours 11-3
pedestrian facility/facilities G-3, 1-3
defined 1-3
  need for G-5
  phasing of improvements 1-23
  project planning 1-22, 3-1
types of G-3
pedestrian flags (portable, hand-carried) 5-42 to 5-43
pedestrian-friendly communities: Toolbox
Section 1
pedestrian-friendly site design:
building location and design 9-5
landscaping and furnishings 9-12 to 9-15
public art 9-14
retrofitting existing development 9-15
schools and school zones
site design/development 9-1 to 9-4
site elements 9-5
shopping centers
pedestrian-friendly site design checklist 9-4
pedestrian-friendly streets: Toolbox Section 2, 1-20
pedestrian level of service 1-25
pedestrian needs 1-2
needs of children and older adults G-9 to G-11
spatial needs G-8, G-9, G-10, 3-4
pedestrian-oriented development 1-18, 1-19
pedestrian overpasses, bridges 5-36 to 5-37
pedestrian realm design checklist 4-17
pedestrian realm zones 4-16 to 4-23
pedestrian refuge islands 5-19 to 5-21
pedestrian safety:
  crashes and collisions G-6 to G-7
  in work zones 11-1 to 11-8
  pedestrian signals (see signals/signalized crossings) 5-6 to 5-15, 5-31
  pedestrian through zone 4-18
  pedestrian travel/trips:
    forecasting use/demand G-6
    in Hawaii P-2, P-3
    length of trips G-3 to G-4
    need for P-2
    studies on G-1 to G-13, 1-26
    travel characteristics and types of trips G-1 to G-4
    walking speeds/travel speeds G-3
  pedestrian underpasses, tunnels 5-37
  permeable surfaces 2-5
  planning for pedestrians 1-1, 1-4-26
  planning for all transportation modes on sites 9-2
  plazas, pedestrian plazas 3-11, 9-7
  portable, hand-carried pedestrian flags 5-42
  public art 9-14
  public awareness campaigns 10-3
  public safety campaigns 10-4
  public service announcements 10-4
  PUFFIN and PELICON devices at crossings 5-41 to 5-42
  railings 7-11 to 7-13
  accessibility requirements 4-23
  adjacent to sidewalks, walkways, and shared use paths 4-37
determining need 4-38
dimensions 4-37, 4-39, 4-40
handrails 3-8, 3-33 to 3-34
public art 7-15
sidewalk cafes 3-11
railroad crossings 5-36
raised crossings/crosswalks 5-31
  at mid-block 5-31
raised pavement markers:
  prior to intersection crossings 5-5
  rumble strips 5-5
ramps (longitudinal) 3-7 to 3-8
ramps, stairways, and steps 9-12
reduced curb return radius (to minimize crossing distances at intersections) 5-22 to 5-26
recycled materials 4-26
refuge islands:
  as traffic calming tools 2-16 to 2-17
design guidelines for 5-29
intersections, at 5-20
mid-block crossings, at 5-29 to 5-31
right-turn channelization lanes (slip lanes) 5-20 to 5-22
residential traffic management 2-14
resources, other 1-26, 2-29, 3-35, 4-40, 5-43, 6-34, 7-27, 8-20, 9-26, 10-31, 11-8
resting areas (along sidewalks and walkways) 4-28
retaining walls (along sidewalks and walkways) 4-38
right-turn channelization lanes (slip lanes) with refuge islands 5-20 to 5-22
rolled curb/curbing (strongly discouraged) 3-19, 4-36
root barriers 7-16
roundabouts 5-38 to 5-40
rural and natural areas 1-21, 4-27
safety (see pedestrian safety)
safety in work zones 11-1
  considerations for pedestrian safety 11-1
  covered walkways 11-2
  fencing around work zones 11-2
  intersections and crossings near work zones 11-4
  maintenance in work zones 11-5, 11-6, 11-7, 11-8
  protective barriers 11-1
sidewalk closure during construction 11-2
temporary pedestrian routes around utility coordination 11-4, 11-7
safety railing 4-37 to 4-40
sandwich board signs, soft sandwich 5-40
school zones/schools; school crossings:
crossing guards 8-16 to 8-17
crosswalks 8-8
design around schools 8-5 to 8-7
educational tools/programs 8-18 to 8-19
elements of good school site design 8-5
location of new schools 8-4
improving student ped. safety 8-3
maintenance in school zones 8-19, 8-20
roadside improvements along school 8-6
safe routes to 8-9 to 8-10, 8-19, 10-5
schools as community focal points 8-3
school bus stop design 8-8
sidewalks and walkways, in 8-6
signals and flashing beacons in 8-6
signing and marking in 8-13
special considerations for children 8-2
student drop-off/pick-up zones 8-8
traffic calming in/near 8-14
traffic control and crossings in/near 8-12
visibility at crossings and in/near 8-8
school walk routes 8-9 to 8-11
  procedures for developing 8-9 to 8-10
  school safety programs 8-9
  school walk routes map 8-11
   visibility at crossings and in/near 8-8
   rolled curb (strongly discouraged) 4-36
shared parking lots 9-9
shared streets, festival streets, play streets 9-24 to 9-26
shared use paths: Toolbox Section 7
  accessibility of 3-8, 7-5, 7-6
  across multiple jurisdictions 7-2
  beach access 7-21 to 7-27
  bollard design and placement along 7-14
  connections and crossings 7-13, 7-14
  crossings/intersections with streets 7-14
  dimensions (recommended) 7-3, 7-4, 7-7 to 7-10
  grades, cross slopes and drainage 7-11
  levels of accessibility on recreational trails
  maintenance 7-26
  managing motor vehicle access 7-22
  multi-use, considerations for 7-5
  nighttime use 7-26
  paving and surfacing 7-11
  recreational trails, design guidelines for regional connectivity 7-2
  seasonal use 7-26
  signage 7-15, 7-17
  shoulders, side slopes, and railings along 7-11 to 7-13
split-pathway entrance 7-14
thickened-edge pavement design 7-24, 7-25
shoulders as walkways 4-11 to 4-16
delineation 4-13
dimensions 4-12
use in rural areas 4-12
sidewalks (and walkways):
buffers/separation 4-11, 4-15
clearances 3-10, 4-23
closure during construction 11=2
cross slope 3-12
curb ramps 3-14 to 3-16
defined 4-1
dimensions (recommended) 4-9, 4-10, 4-23
grades, cross slope and drainage 4-23
in central business districts (CBDs) and downtowns 4-17
in various settings 4-5
location - both sides vs. one side 4-9
maintenance of 4-40
meandering 4-28
need of 4-3
passing, waiting and resting areas along sidewalks 3-11
pedestrian realm zones 4-17
pedestrian realm design checklist 4-17
priorities for pedestrians traveling 4-2
side slopes, railings and walls along 4-37
sidewalking corridors 4-16
surfacing treatments 4-24
very low volume streets 4-6
when and where needed 4-3
width/dimensions 4-9, 4-23
sight distance (also see visibility/visual clearance/sight distance) 5-33 to 5-34
signals/signalized crossings 5-6 to 5-15
crossing distances, speeds and times 5-9
design and location of pedestrian signals 5-14 to 5-15
determining the need for pedestrian signals 5-6
flashing beacons 8-16
mid-block pedestrian actuated signals 5-31, 5-32
pedestrian actuated signals 5-13
pedestrian signal indications 5-7 to 5-9
pedestrian signal timing 5-9 to 5-13
pedestrian hybrid beacon 5-12, 5-13
pedestrian indications 5-15
push-buttons (actuators/detectors) 5-13
signal timing 5-9 to 5-14, 8-16
signs/signage/wayfinding 2-21, 2-22, 3-27, 5-15 to 5-16
advanced warning signs and pedestrian crossings 5-15
crossing signs at mid-block 5-31, 5-32
soft sandwich signs 5-40
shared use paths/trails 7-15
site driveway design 9-10 to 9-24
sites and corridors used exclusively by pedestrians 9-22
six "Es", the 10-1
skewed intersections, avoiding, reconfiguring 5-17
skills practices 10-5
skywalks and skyways 5-37 to 5-38
slopes (see cross slopes, grades, and side slopes) 4-23
soft sandwich signs at crossings 5-40
spatial needs G-8 to G-10, 3-4
special paving 2-18, 4-24 to 4-27, 5-43
special pedestrian districts 9-20
speed humps/speed tables (traffic calming):
mid-block crossing 5-31, 5-32
raised crosswalk/speed table 9-2
reduced injury statistics 2-14
traffic calming technique 2-15, 2-17
speed watch programs 10-5
stairs and steps 9-12, 9-13
height between landings 9-13
landing dimensions 9-13
stairway width 9-13
step dimensions 9-13
tread design 9-13
tread to riser ratio 9-13

standards, others to reference H-3, 1-26, 2-29, 3-35, 4-40, 5-43, 6-34, 7-27, 8-20, 9-26, 10-31, 11-8

state highways 10-31, 11-8

stopping distances related to speed/pedestrian collisions G-7, 8-15

street design (with the pedestrian in mind; see also pedestrian-friendly streets):
  access management and driveway placement/design 2-11
  access to transit 9-17 to 9-18
  bike lanes as separation/ buffer 2-8
  driveways 2-12
  markings, zig-zag and sharks teeth, 5-43
  on-street parking as buffer for pedestrians 2-7, 2-8
  on-street parking setback requirements 2-10
  parking along streets 2-7 to 2-10
  shared streets 2-6
  signing and wayfinding 2-21
  street furnishings 2-23, 4-47 to 4-31

street trees 4-23 to 4-25
walkability audits 1-12

street lighting 2-26 to 2-29, 3-34
  along streets/sidewalks 2-26 to 2-29, 3-34
  intersections, at 2-26 to 2-29, 3-34
  mid-block, at 2-29, 5-33

street trees and landscaping along sidewalks 4-23 to 4-25

student patrols and crossing guards at crossings 8-16 to 8-18

surfacing treatments:
  pedestrian access routes 2-8
  shared use paths 7-11
  sidewalks and walkways 4-25 to 4-27
  sustainable streets 2-5

thickened-edge pavement design (along shared use paths/trails 7-25

traffic calming 2-13 to 2-18
  chicanes 2-15
  common residential traffic management program actions 2-14
  common types of traffic calming methods 2-15 to 2-18
  control devices 8-20, 11-7

cul-de-sac street closures 2-17
curb bulb-outs/chokers/neckdowns 2-16
diagonal diverters 2-16
forced turns and partial dividers 2-16
narrower streets/skinny streets 2-17
one-way entry and exit 2-17
police enforcement 2-18
purpose of 2-13
residential areas 2-15
signs and neighborhood gateways 2-18
special paving 2-18
speed humps/speed tables 2-17
speed watch programs 2-18
street trees 2-17
training programs 10-4 to 10-11

transit, pedestrian access to: Toolbox Section 6
  accessibility 6-2
  coordination between agencies 6-7
  Hawaii transit services 6-3 to 6-4
  horizontal and vertical clearances 6-13
  importance of 6-1
  pedestrian routes to 6-13
  transit-compatible planning and site design 6-4
  transit-oriented development 6-7
transit stop locations 6-9 to 6-12

transit centers 6-26

transit-compatible design 6-4

transit-friendly, transit-oriented design 6-7, 9-17

transit stops, transit shelters, and bus pull outs 6-9 to 6-26

artwork at 6-15
lighting at 6-14 to 6-15
pedestrian comfort at 6-15
security at 6-14
locations, near-side, far-side and mid-block 6-9
signage 6-23 to 6-25
spacing between stops 6-9
typical bus stop cross section 6-19
widened sidewalk bus loading areas 6-18
vertical clearances along sidewalks/
walkways 6-13

underpasses and tunnels 5-37

urban areas G-3

visibility/visual clearance/sight distance 5-33 to 5-34

at intersections 5-33
on-street parking restrictions 2-7

walk score 1-12, 1-13, 1-16, 1-17

walkability 1-12, 1-14

walkability audits 1-12
walkability/walking distances (acceptable) 1-13 to 1-18
walking incentives 10-25 to 10-26
walking programs and events 10-27
walking speeds:
related to crossing distance/time of crossing 5-9

walkways (see sidewalks and walkways)
wayfinding 10-26
woonerfs 2-6, 2-7
work zones (see safety in work zones)
zig-zag markings 5-43