

MAPS GLOBAL DATA DICTIONARY

Route: Destinations and Land Use Section

Item	Source	Item Content	Coding	Max points
LU1	MAPS Full	How is audit information collected?	Foot (walked route) = 1 Auto (drove route) = 2 Both = 3 Online = 4	NA
LU2a	MAPS Full	Single family homes	No = 0 Yes = 1	NA
LU2b	MAPS Full	Multi-unit homes (duplex,4plx)	No = 0 Yes = 1	NA
LU2c	MAPS Full	Apartments or condominiums	No = 0 Yes = 1	NA
LU2d	MAPS Full	Apartments above street retail	No = 0 Yes = 1	NA
LU3a	MAPS Full	Food-related uses: Fast food restaurant	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3b	MAPS Full	Food-related uses: Sit-down restaurant or bar (all-ages)	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3c	MAPS Full	Food-related land uses: Grocery/supermarket	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3d	MAPS Full	Food-related land uses: Convenience store (incl. gas station)	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3e	MAPS Full	Food-related uses: Café or coffee shop	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3f	EAST_HK	Food-related uses: Bakery	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3g	MAPS Full, adapted to "age-restricted"	Food-related uses: Age-restricted bar/nightclub	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3h	MAPS Full	Food-related land uses: Liquor/alcohol store	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3i	MAPS Full	Retail and service-oriented land uses: Bank or credit union	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3j	MAPS Full	Retail and service-oriented land uses: Drugstore/pharmacy	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3k	MAPS Full	Retail and service-oriented land uses: Health-related professional	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3l	MAPS Full	Retail and service-oriented land uses: Entertainment	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3m	MAPS Full	Retail and service-oriented land uses: Other service	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3n	MAPS Full	Retail and service-oriented land uses: Other retail	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3o	MAPS Full	Government or community land use: Place of worship	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3p	MAPS Full	Government or community land use: School	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3q	MAPS Full	Recreational land use: Private indoor recreation	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3r	MAPS Full	Recreational land use: Public indoor	0 = 0, 1 = 1, 2 = 2	5

		recreation	3=3, 4=4, 5+=5	
LU3s	MAPS Full	Recreational land use: Private outdoor recreation	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3t	MAPS Full	Recreational land use: Public outdoor pay recreation	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3u	MAPS Full	Recreational land use: Public park	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3v	ALPHA	Recreational land use: Trail	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3w ^a	ALPHA	Other land use: Pedestrian street or zone	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU3x ^b	Study investigators	Bicycle shop	0 = 0, 1 = 1, 2 = 2 3=3, 4=4, 5+=5	5
LU4a	MAPS Full	Shopping centers: Shopping mall or arcade	No = 0 Yes = 1	1
LU4b	MAPS Full	Shopping centers: Strip mall	No = 0 Yes = 1	1
LU4c	Study investigators	Shopping centers: Open-air market	No = 0 Yes = 1	1
Positive Residential Density Subscale				
ResMix	NA	Residential Mix	Apartment over retail only = 1 Apts or multi-family only = 2 Mixed or other = 3 Single family only = 4 None=0	NA
ResDensity Mix_recode	NA	Residential density mix recoded (points)	0=commercial 1=single family 2=multi-family only and any other mix 3=apts over retail only	3
Positive Shops Subscale				
Shops	NA	Shops Subscale Score (grocery, convenience store, bakery, drugstore, other retail, shopping mall, strip mall, open air market)	LU3c + LU3d + LU3f + LU3j + LU3n + LU4a + LU4b + LU4c	28
Positive Restaurant and Entertainment Subscale				
Restaur_Ent	NA	Restaurants and Entertainment subscale (fast food, sit-down, café, entertainment)	LU3a + LU3b + LU3e + LU3l	20
Positive Institutional/Services Subscale				
Institu_Svc	NA	Institutional/Services subscale (bank, health-related professional, other service)	LU3i + LU3k + LU3m	15
Positive Public Recreation Subscale				
Public_Rec	NA	Public Rec facilities subscale (public indoor, public outdoor pay, public park and trail)	LU3r + LU3t + LU3u + LU3v	20
Positive Private Recreation Subscale				
Private_Rec	NA	Private Rec facilities subscale (private indoor & outdoor)	LU3q + LU3s	10
Positive Destinations and Land Use				
DLU_pos	NA	Positive Land Uses: sum of positive subscales	ResDensityMix_recode + Shops + Restaur_Ent + Institu_Svc + LU3o +	111

			LU3p + Public_Rec + Private_Rec + LU3x	
Negative Destinations and Land Uses				
DLU_Neg	NA	Negative Land uses (age-restricted bar, liquor or alcohol store)	LU3g + LU3h	10
Overall Destinations and Land Use				
DLU_Overall	NA	Overall Destinations and Land Use Scale	DLU_pos – DLU_Neg	

^a not included in subscales

^b added after the MAPS-Global reliability study

Route: Streetscape Section

Item	Source	Item Content	Coding	Points
SS1	MAPS Full	Number of public transit stops	#	NA
SS1_recode	NA	Number of transit stops, recoded	0=0 1=1 2=2 3-5=3 6-10=4 11+=5	5
SS2a	MAPS Full	What is available at the first transit stop? Bus	No = 0 Yes = 1	1
SS2b	Study investigators	What is available at the first transit stop? BRT	No = 0 Yes = 1	1
SS2c	Study investigators	What is available at the first transit stop? Train	No = 0 Yes = 1	1
SS2d	Study investigators	What is available at the first transit stop? Subway	No = 0 Yes = 1	1
SS2e	Study investigators	What is available at the first transit stop? Tram/streetcar	No = 0 Yes = 1	1
SS2f	MAPS Full	What is available at the first transit stop? Bench	No = 0 Yes = 1	1
SS2g	MAPS Full	What is available at the first transit stop? Covered shelter	No = 0 Yes = 1	1
SS2h	MAPS Full	What is available at the first transit stop? Timetable	No = 0 Yes = 1	1
SS3a ^b	Study investigators	What other transportation options on the route? Tuktuk/auto rickshaw	No = 0 Yes = 1	1
SS3b ^b	Study investigators	What other transportation options on the route? Car share	No = 0 Yes = 1	1
SS3c ^b	Study investigators	What other transportation options on the route? Taxi	No = 0 Yes = 1	1
SS3d ^b	Study investigators	What other transportation options on the route? Private bus	No = 0 Yes = 1	1
SS3e	Study investigators	What other transportation options on the route? Bicycle share	No = 0 Yes = 1	1
Transit subscale	NA	Transit: number of stops, transit type and amenities (bench, shelter, and timetable), informal places to catch transit	SS1_recode+SS2a+SS2b+SS2c+SS2d+SS2e+SS2f+SS2g+SS2h+SS3a+SS3b+SS3c+SS3d+SS3e	18
SS4a	MAPS Full	Traffic calming (signs, circles, speed	#	NA

		tables, speed humps, curb)		
SS4a_recode	NA	What other street characteristics are present? Traffic calming (signs, circles, speed tables, speed humps, curb), recoded	None = 0 1 = 1 2=2 3=3 4=4 5+=5	5
SS4b ^a	MAPS Full	Roll-over curbs (if whole segment = 1)	#	
SS5a	MAPS Full	Presence of street amenities: Trash bins	No = 0 Yes = 1	1
SS5b	MAPS Full	Presence of street amenities: Benches/places to sit	No = 0 Yes = 1	1
SS5c	MAPS Full	Presence of street amenities: Bicycle racks	No = 0 Yes = 1	1
SS5d	Bikeability Toolkit	Presence of street amenities: Secure bicycle access lockers or compounds	No = 0 Yes = 1	1
SS5e	MAPS Full	Presence of street amenities: Kiosks or information booths	No = 0 Yes = 1	1
SS5f	EAST_HK, adapted to include those not on only obstructing the sidewalk	Presence of street amenities: Hawkers/shops/carts	No = 0 Yes = 1	1
Positive Streetscape Subscale				
Pos_Street scape	NA	Positive Streetscape subscale: Transit, traffic calming, street amenities (trash bins, benches, bike racks, bike lockers, kiosks, hawkers)	Transit + SS4a_recode + SS5a + SS5b + SS5c + SS5d + SS5e + SS5f	29

^a not included in subscales

^b added after the MAPS-Global reliability study

Route: Aesthetics and Social Section

Item		Item Content	Coding	Points
A1	MAPS Full	Do you observe pleasant hardscape features, such as fountains, sculptures, or art (public or private)?	No = 0 Yes = 1	1
A2	SPACES (adapted)	Do you observe any natural bodies of water?	No = 0 Yes = 1	1
A3	MAPS Full	Do you observe softscape features such as gardens or landscaping?	No = 0 Yes = 1	1
A4	MAPS Full	Are the buildings well-maintained? (%)	0% = 1 1-49% = 2 50-99% = 3 100% = 4	NA
A4_dichot_neg	NA	Are the buildings well maintained? Dichotomized	0-99% = 1 100% = 0	1
A5	MAPS Full	Is the landscape well maintained? (%)	0% = 1 1-49% = 2 50-99% = 3 100% = 4	NA
A5_dichot	NA	Is the landscape well maintained?	0-99% = 0	1

		Dichotomized	100% = 1	
A6	MAPS Full	Is graffiti/tagging (not murals) present?	No = 0 Yes = 1	1
A7	MAPS Full	Is noticeable/excessive litter present?	No = 0 Yes = 1	1
A8	EAST_HK, REAT, SPEEDY	Is noticeable/excessive dog fouling present?	No = 0 Yes = 1	1
A9	MAPS Full, adapted to include fouling	Rate the extent of graffiti, litter and dog fouling.	None = 1 A little = 2 Some = 3 A lot = 4	NA
A9_dichot	NA	Rate the extent of graffiti, litter and dog fouling. Dichotomized	None = 0 A little, some or a lot = 1	1
A10 ^a	MAPS Full	Presence of anyone walking?	No = 0 Yes = 1	1
A11	MAPS Full	Is there a highway (street which is 45mph+ or 5+ traffic lanes wide) nearby?	No = 0 Yes = 1	1
Positive Aesthetics and Social Subscale				
Pos_Aesth Soc	NA	Positive Aesthetics and Social Subscale: Hardscape, water, softscape, landscaping	A1 + A2 + A3 + A5_dichot	4
Negative Aesthetics and Social Subscale				
Neg_Aesth Soc	NA	Negative Aesthetics and Social Subscale: Buildings not maintained, graffiti, litter, dog fouling, extent physical disorder, highway nearby	A4_dichot_neg + A6 + A7 + A8 + A9_dichot + A11	6
Overall Aesthetics and Social Subscale				
AesthSoc_Overall	NA	Overall Aesthetics and Social Subscale	Pos_AesthSoc - Neg_AesthSoc	

^a not included in subscales

Crossings Section

(Note: There are multiple crossings possible per route; C1 indicates the first crossing, for which the variable and subscales are listed below. For subsequent crossings, use C2, C3, etc. for naming.)

Item	Source	Item Content	Coding	
C1_1a	MAPS Full	Intersection control: Yield signs	No = 0 Yes = 1	1
C1_1b	MAPS Full	Intersection control: Stop signs	No = 0 Yes = 1	1
C1_1c	MAPS Full	Intersection control: Traffic signal	No = 0 Signal not working = 1 ^b Yes = 2	2
C1_1d	MAPS Full	Intersection control: Traffic circle	No = 0 Yes = 1	1
C1_1e	MAPS Full	Intersection control: N/A (Unanticipated mid-segment crossing)	No = 0 Yes = 1	1
C1_2	EAST_HK, SPACES (adapted)	Does this crossing take place on an overpass, underpass or bridge?	No = 0 Yes = 1	1
C1_3a	MAPS Full	Signalization: Pedestrian walk signals	No = 0	1

			Yes = 1	
C1_3b	MAPS Full	Signalization: Push buttons	No = 0 Yes = 1	1
C1_3c	MAPS Full	Signalization: Countdown signal	No = 0 Yes = 1	1
C1_3d	Bikeability Toolkit (adapted)	Signalization: Bicycle signal	No = 0 Yes = 1	1
C1_4a	MAPS Full	Pre-crossing curb	Ramp lines up w/xing = 1 Ramp does not line up = 2 No ramp = 3	NA
C1_4a_positive	NA	Pre-crossing curb - option 1: Ramp lines up with crossing. Recoded	Ramp lines up w/xing = 2 Ramp doesn't line up = 1 No ramp = 0	2
C1_4b	MAPS Full	Post-crossing curb	Ramp lines up w/xing = 1 Ramp does not line up = 2 No ramp = 3	NA
C1_4b_positive	NA	Post-crossing curb - option 1: Ramp lines up with crossing. Recoded	Ramp lines up w/xing = 2 Ramp doesn't line up = 1 No ramp = 0	2
C1_5	FASTVIEW	Is tactile paving provided at curbs?	No = 0 Yes, at one curb = 1 Yes, at both curbs = 2	2
C1_6	MAPS Full	Are crossing aids (e.g., flags) present?	No = 0 Yes = 1	1
C1_7a	MAPS Full	Crosswalk treatment: Marked crosswalk	No = 0 Yes = 1	1
C1_7b	MAPS Full	Crosswalk treatment: High-visibility striping	No = 0 Yes = 1	1
C1_7c	MAPS Full	Crosswalk treatment: Different material than road	No = 0 Yes = 1	1
C1_7d	MAPS Full	Crosswalk treatment: Curb extension	No = 0 Yes = 1	1
C1_7e	MAPS Full	Crosswalk treatment: Raised crosswalk	No = 0 Yes = 1	1
C1_8	MAPS Full	Is a protected refuge island present?	No = 0 Yes = 1	1
C1_9	MAPS Full	Distance of crossing leg, including all potential parking and turn lanes (# lanes)	#	NA
C1_9_tric_hot	NA	Road_Width_C1	1 - 2 = 0 3 - 4 = 1 5 - Highest = 2	2
C1_10	Bikeability Toolkit	Is a waiting area ('bike box') provided for cyclists who stop at the crossing?	No = 0 Yes = 1	1
C1_11	MAPS Full	Does a bike lane or path cross the crossing?	No = 0 Yes = 1	1
Positive Crosswalk Amenities Subscale				
Crosswalk Amenities_C1	NA	Crosswalk amenities: Positive subscale (Crossing aids, marked crosswalk, high visibility striping, different material than road, curb extension, raised crosswalk,	C1_6 + C1_7a + C1_7b + C1_7c + C1_7d + C1_7e + C1_8	7

		protected refuge islands).		
Positive Curb Quality/Presence Subscale				
Curb_Qual_C1	NA	Curb Quality and Presence Subscale	C1_4a_positive + C1_4b_positive_C1_5	6
Positive Intersection Control and Signage Subscale				
IntsectCtrlSign_C1	NA	Intersection Control/Signage: Positive subscale (Yield signs, stop signs, traffic signal, traffic circle, pedestrian walk signals, push buttons, countdown signal)	C1_1a + C1_1b + C1_1c + C1_1d + C1_3a + C1_3b + C1_3c	8
Positive Bike (single item)				
Bike_C1	NA	Bike: Positive subscale (Waiting area, bike lane crossing the xing, bike signal)	C1_10 + C1_11 + C1_3d	3
Overpass (single item)				
C1_2	NA	Does this crossing take place on a pedestrian overpass, underpass or bridge?	No = 0 Yes = 1	1
Negative Road Width (single item)				
Road_Width_C1	NA	Distance of crossing leg, including all potential parking and turn lanes. Trichotomized	1 – 2 = 0 3 – 4 = 1 5 – Highest = 2	2
Positive Crossing Subscale				
PosCrossChars_C1	NA	Positive Crossing	CrosswalkAmenities_C1 + CurbQual_C1 + IntsectCtrlSign_C1 + Bike_C1 + C1_2	25
Negative Crossing Subscale				
NegCrossChars_C1	NA	Negative Crossing: road width	Road_Width_C1	2
Overall Crossing				
OverallCrossScore_C1	NA	Overall Crossing Scale	PosCrossChars_C1 – Road_Width_C1	

^a not included in subscales

^b added after the MAPS-Global reliability study

Segments Section

(Note: There are multiple segments possible per route; S1 indicates the first segment, for which the variables and subscales are listed below. For subsequent segments, use S2, S3, etc. for naming variables and subscales.)

Item	Source	Item Content	Coding	Points
S1_type ^a	MAPS Full	Type: residential/commercial (count both sides)	Residential = 1 Commercial = 2	2
S1_1	MAPS Full, adapted to include pedestrian street	How many traffic lanes are present (include traffic and turn lanes; choose most predominant)?	0 (pedestrian street or zone) = highest score for sidewalk and buffer 1-7+ = 1-7	7
S1_2	MAPS Full	Is parking allowed on the segment?	None = 0 1-25% = 1 26-50% = 2 51-75% = 3 76-100% = 4	NA

S1_2_recode	NA	Is parking allowed on the segment?	0%=0 1-25% = 1 26-50% = 1 51-75%=2 76-100%=2	2
S1_3	MAPS Full	Is a continuous sidewalk present?	Yes, sidewalk continuous = 1 No, not continuous = 2 No, no sidewalk = 0	NA
S1_3_recode	NA	Is a continuous sidewalk present? Recoded	Yes, continuous = 3 No, not continuous = 1 No, no sidewalk = 0	3
S1_3_negative	NA	Is the sidewalk <i>continuous</i> within the segment? Recoded	No = 1 Yes = 0	1
S1_4	MAPS Full	What is the width of the majority of the sidewalk?	<3 ft/1m = 1 3-5 ft/1-1.5m = 2 >5 ft/1.5m = 3 No sidewalk = -777	NA
S1_4_recode	NA	What is the width of the majority of the sidewalk? Recoded	<3 feet = 2 3-5 feet = 2 >5 feet = 3 No sidewalk = 0	3
S1_5	MAPS Full	Is a <u>buffer</u> present?	No sidewalk = -777 No = 0 Yes = 1	NA
S1_5_recode	NA	Is there a buffer present? Recoded	No sidewalk = 0 No = 0 Yes = 3	3
S1_6	MAPS Full	Are there poorly maintained sections of the sidewalk that constitute <u>trip hazards</u> ?(e.g, heaves, misalignment, cracks, overgrowth) <u>Major</u>	None = 0 One = 1 A few = 2 Many = 3 No sidewalk = -777	NA
S1_6_tric hot	NA	Are there poorly maintained sections of the sidewalk that constitute <u>trip hazards</u> ? Major; trichotomized	0-1 = 0 A few = 1 Many = 2	2
S1_7	EAST_HK	Are there hawkers or shops on the sidewalk or pedestrian street/zone?	None = 0 One = 1 A few = 2 Many = 3 No sidewalk/ped zone = -777	NA
S1_7_tric hot	NA	Are there hawkers or shops on the sidewalk or ped street/zone?	None = 0 One = 1 A few = 1 Many = 2	2
S1_8	Bikeability Toolkit	Are there signs, bus shelters, kiosks and street furniture obstructing the sidewalk or pedestrian street/zone?	None = 0 One = 1 A few = 2 Many = 3 No sidewalk/ped zone = -777	NA
S1_8_tric hot	NA	Are there signs, bus shelters, kiosks and street furniture obstructing the sidewalk or	None or one = 0 Some = 1	2

		ped zone? trichotomized	Many = 2	
S1_9	MAPS Full, adapted to isolate cars	Are there cars blocking the sidewalk or pedestrian street/zone?	None = 0 One = 1 A few = 2 Many = 3 No sidewalk/ped zone = -777	NA
S1_9_tric hot	NA	Are there cars blocking the sidewalk or ped zone? trichotomized	None or one = 0 Some = 1 Many = 2	2
S1_10	MAPS Full	Is there an informal path (shortcut), not on a cul-de-sac which connects to something else?	No = 0 Yes = 1	1
S1_11	SPACES, EAST_HK, Bikeability Toolkit (adapted)	What is the slope of the majority of the segment?	Flat/gentle = 1 Moderate = 2 Steep = 3	NA
S1_11_dic hot	NA	What is the slope of the majority of the segment? Dichotomized	Flat or gentle = 0 Moderate or steep = 1	1
S1_12	MAPS Full	How many trees exist within 5 feet (1.5m) of either side of the sidewalk/pathway (can be in buffer or setback; also count trees that are more than 5 feet (1.5m) away if they provide shade for the sidewalk/pathway)	0-1 = 1 2-5 = 2 6-10 = 3 11-20 = 4 21+ = 5 No sidewalk/pathway = -777	NA
S1_12_tri chot	NA	How many trees exist within 5 feet of either side of the sidewalk/pathway? Trichotomized	No sidewalk/NA = 0 0-1 trees = 0; 2-10 trees = 1 >11 trees = 2	2
S1_13	MAPS Full, adapted to isolate trees	What percentage of the length of the sidewalk/walkway is covered by trees?	1-25% = 1 26-50% = 2 51-75% = 3 76-100% = 4 No coverage = 5 No sidewalk = -777	NA
S1_13_tri chot	NA	What percentage of sidewalk/walkway is covered by trees? Trichotomized	No coverage or no sidewalk/NA and $\leq 25\%$ = 0 26%-75% = 1 >75% = 2	2
S1_14	MAPS Full, adapted to isolate non-tree coverage	What percentage of the length of the sidewalk/walkway is covered by awnings or other overhead coverage?	1-25% = 1 26-50% = 2 51-75% = 3 76-100% = 4 No coverage = 5 No sidewalk = -777	NA
S1_14_tri chot	NA	What percentage of sidewalk/walkway is covered by other overhead coverage? Trichotomized	No coverage or no sidewalk/NA and $\leq 25\%$ = 0 26%-75% = 1 >75% = 2	2
S1_15	MAPS Full	What is the smallest building setback from the sidewalk?	No building = 1 0 ft = 2	NA

			1-10 feet = 3 10-20 feet = 4 21-50 feet = 5 51-100 feet = 6 >100 feet = 7	
S1_16	MAPS Full	What is the largest building setback from the sidewalk/walkway?	No building = 1 0 ft = 2 1-10 feet = 3 10-20 feet = 4 21-50 feet = 5 51-100 feet = 6 >100 feet = 7	NA
S1_15_16_0pts	NA	Either setback (S1_15, S1_16) >50 ft and no building.	No = 0 Yes = 0	NA
S1_15_16_1point	NA	All other combinations of S1_15 and S1_16	No = 0 Yes = 1	NA
S1_15_16_2points	NA	Both setbacks (S1_15 and S1_16) 10-20 ft. or one setback 0 ft or 1-10 ft and one setback 10-20 ft.	No = 0 Yes = 2	NA
S1_15_16_3points	NA	Both setbacks (S1_15 and S1_16) 1-10 ft.	No = 0 Yes = 3	NA
S1_15_16_5points	NA	Both setbacks (S1_15 and S1_16) 0 ft	No = 0 Yes = 5	NA
S1_15_16_points	NA	Smallest and largest setback scores combined	S1_15_16_0pts + S1_15_16_1point + S1_15_16_2points + S1_15_16_3points + S1_15_16_5points	5
S1_17	MAPS Full, adapted to collect shortest and tallest, and to include higher buildings	What is the shortest building height? (<i>Count both sides of the street</i>)	No building = 1 1-3 stories = 2 4-6 stories = 3 7-12 stories = 4 13-20 stories = 5 21+ stories = 6	NA
S1_18	MAPS Full, adapted to collect shortest and tallest, and to include higher buildings	What is the tallest building height? (<i>Count both sides of the street</i>)	No building = 1 1-3 stories = 2 4-6 stories = 3 7-12 stories = 4 13-20 stories = 5 21+ stories = 6	NA
S1_bldg_height_record	NA	What is the average height of buildings? (S1_17 + S1_18)/2	0-1.9 = 0 2-2.9 = 1 3-3.9 = 2 4-4.9 = 3 5-5.9 = 4 6 = 5	5
S1_19	Study investigators	How many properties are protected by gates, walls or tall fences (6ft/2m or over)?	None = 0 1-25% = 1 26-50% = 2 51-75% = 3 76-100% = 4	NA
S1_19_trichot	NA	How many properties are protected by gates, walls or tall fences?	None = 0 1-25% = 1	2

		Trichotomized	26-50% = 1 51-75% = 2 76-100% = 2	
S1_20	MAPS Full, adapted to collect at segment level	How many driveways are there? Do not count alleys	None = 0 1-2 = 1 3-5 = 2 6+ = 3	3
S1_21	MAPS Full	Estimate the proportion of street segment that has ground floor or street-level windows within 40 feet of sidewalk/walkway (or street if no sidewalk/walkway)?	1-25% = 1 26-50% = 2 51-75% = 3 76-100% = 4 No windows = -777	NA
S1_21_trichot	NA	Proportion of street segment w/windows within 40 feet of sidewalk/walkway (or street): Trichotomized	No windows – 25% = 0 26%-75% = 1 >76% = 2	2
S1_22	MAPS Full	Is there a mid-segment crossing?	No = 0 Yes = 1	1
S1_23	EAST_HK, SPACES	If yes, is it a pedestrian bridge/overpass or a tunnel?	No = 0 Yes = 1 No mid-seg xing = -777	NA
S1_23_rec ode	NA	If yes, is it a pedestrian bridge/overpass or a tunnel?	No = 0 Yes = 1 -777 = 0	1
S1_24	EAST_HK (adapted)	Is there a covered or air conditioned place to walk along the street or connecting buildings (not a mall)?	No = 0 Yes = 1	1
S1_25	MAPS Full, adapted with input from Bikeability Toolkit, FASTVIEW	Is there a bicycle lane or zone? Select one.	Yes, on the sidewalk = 1 Yes, separated from traffic by a marked line = 2 Yes, separated from traffic by a raised curb = 3 Yes, separated from traffic by a buffer (plantings, parked cars, fencing, etc) = 4 No = 0	NA
S1_25_rec ode	NA	Is there a bicycle lane or zone? Recoded	On sidewalk = 1 Marked line = 1 Raised curb = 2 Buffer = 2 No = 0	2
S1_26	Bikeability Toolkit, SPACES (adapted)	What is the quality of the bicycle lane or zone?	Poor = 1 Fair = 2 Excellent = 3 No bike lane/zone = -777	NA
S1_26_rec ode	NA	What is the quality of the bicycle lane or zone? Recoded	Poor = 0 Fair = 1 Excellent = 2	2
S1_27	MAPS Full	Are there signs or sharrows indicating bicycle use?	No = 0 Yes = 1	1
S1_28a	MAPS Full, adapted from FASTVIEW to	How many high (car) street lights are installed?	None = 0 Some = 1 Ample = 2	NA

	include street lighting			
S1_28_dic hot	NA	How many high (car) street lights are installed?	None = 0 Any = 1	1
S1_28b	MAPS Full, adapted to isolate pedestrian lighting	How many low (pedestrian) street lights are installed?	None = 0 Some = 1 Ample = 2	NA
S1_29_dic hot	NA	How many low (pedestrian) street lights are installed?	None = 0 Any = 1	1
Positive Setback and Building Height Subscale				
PosBldgHtSetbks_S1	NA	Positive Setbacks/Bldg. Height: Positive subscale	S1_15_16_points + S1_bldg_height_recode	10
Positive Sidewalk Subscale				
Sidewalk_Pos_S1	NA	Sidewalk presence and width. Give best possible score to those with a pedestrian street/zone. Pedestrian street/zone = 6 points.	S1_3_recode+S1_4_recode	6
Positive Buffer Subscale				
Buffers_Pos_S1	NA	Buffers: Positive subscale	S1_2_recode + S1_5_recode	5
Positive Bike Infrastructure Subscale				
Bike_Infra_S1	NA	Bike Infrastructure: Positive subscale	S1_25_recode + S1_26_recode + S1_27	5
Positive Building Aesthetics and Design (single item)				
S1_21_trichot	NA	Proportion of street segment w/windows within 40 feet of sidewalk/walkway (or street): Trichotomized	No windows – 25% = 0 26%-75% = 1 >76% = 2	2
Positive Shade Subscale				
Shade_S1	NA	Shade: Positive subscale	S1_12_trichot + S1_13_trichot + S1_14_trichot	6
Positive Pedestrian Infrastructure Subscale				
Ped_Infrastucture_S1	NA		S1_22 + S1_23_recode + S1_24 + S1_28_dichot + S1_29_dichot	5
Positive Informal Path or Shortcut (single item)				
S1_10	NA	Is there an informal path (shortcut), not on a cul-de-sac which connects to something else?	No = 0 Yes = 1	1
Positive Hawkers/Shops (single item)				
S1_7_trichot	NA	Are there hawkers or shops on the sidewalk or ped street/zone?	None = 0 One = 1 A few = 1 Many = 2	2
Building Height to Road Width Ratio Subscale				
S1_1_feet	NA	How many traffic lanes are present? Recalculated in feet.	1 = 12 2 = 24 3 = 36 4 = 48 5 = 60	

			6 = 72 7+ = 84	
S1_15_fee tmid	NA	Smallest building setback from the sidewalk, calculated using the midpoint of response option ranges.	No building = 0 0 ft = 0 1-10 feet = 5 10-20 feet = 15 21-50 feet = 35 51-100 feet = 75 >100 feet = 100	
S1_16_fee tmid	NA	Largest building setback from the sidewalk, calculated, using the midpoint of response option ranges.	No building = 0 0 ft = 0 1-10 feet = 5 10-20 feet = 15 21-50 feet = 35 51-100 feet = 75 >100 feet = 100	
S1_15_16 _feetmid_ avg	NA	Average smallest and largest setback midpoints (S1_15 and 16). (Part of the bottom of the ratio.)	Calculated numeric range	
S1_bldg_h eight_ft	NA	Average building height –recalculated in feet (using midpoint of response option ranges * 12). (Top of the ratio.)	No building = 0 1-3 stories = 24 4-6 stories = 60 7-12 stories = 114 13-20 stories = 198 21+ stories = 300	
RdWdth_pl us_Setbk_a vg_S1	NA	Road width (in feet) plus setback averages	S1_1_feet + S1_15_16_feetmid_avg	
BldgHt_R dWdthSet bk_Ratio_ S1	NA	Building Height: Road Width+Setback Avg. Ratio	S1_bldg_height_ft/RdWd th_plus_Setbk_avg_S1	
BldgHt_R dWdthSet bk_Ratio_ Scores_S1	NA	Scores for the above ratio.	Lowest - .499 = 0 .50 - .999 = 1 1.0 - 1.999 = 3 2.0 - 2.999 = 2 3.0 – Highest = 1	3
Positive Segments Subscale				
Segments _Pos_S1	NA	Sum of positive segment subscales	PosBldgHtSetbks_S1+ Sidewalk_Pos_S1+ Buffers_Pos_S1+ Bike_Infra_S1+ S1_21_trichot+ Shade_S1+ Ped_Infrastructure_S1 + S1_10+S1_7_trichot + BldgHt_RdWdthSetbk_R atio_Scores_S1	45
Negative Segments Subscale				
Segment_ Neg_S1	NA	Sidewalk : Negative subscale (non-continuous sidewalk, trip hazards, obstructions, cars blocking walkway, slope, gates, driveways)	S1_3_negative + S1_6_trichot + S1_8_trichot + S1_9_trichot + S1_11_dichot +	13

		Give worst possible score to those with no sidewalk. Give best possible score to those with a pedestrian street/zone. No sidewalk = 13 Pedestrian street/zone = 0	S1_19_trichot + S1_20	
Overall Segments Subscale				
Overall_Segment	NA	Overall segment score	Segments_Pos_S1-Sidewalk_Neg_S1	

^a not included in subscales

Cul-De-Sac Section (Note: There may be multiple cul-de-sacs per route; D1 indicates the first cul-de-sac, for which the variables and subscale are listed below. For subsequent cul-de-sacs, use D2, D3, etc., for naming.)

Item	Source	Item Content	Coding	Points
D1_1	MAPS Full	How close is cul-de-sac or dead-end to participant's home?	On the Cds = 1 Adjacent = 2 <200 feet away = 3 >200 feet away = 4	
D1_1_dichot	NA	How close is cul-de-sac or dead-end to participant's home? Dichotomized.	On the CdS = 1 Adjacent = 1 <200 feet away = 0 >200 feet away = 0	1
D1_2a	MAPS Full	What amenities exist at opening to or in cul-de-sac? Basketball hoops (number)	#	
D1_2b	MAPS Full	What amenities exist at opening to or in cul-de-sac? Skateboard features (number)	#	
D1_2c	Study investigators	What amenities exist at opening to or in cul-de-sac? Soccer goals (number)	#	
D1_2d	Study investigators	What amenities exist at opening to or in cul-de-sac? Outdoor fitness equipment (number)	#	
D1_2_sum	NA	Total amenities: basketball hoops + skateboard features + soccer goals + outdoor fitness equipment	#	
D1_2_sum_trichot	NA	Total amenities: sum: Trichotomized.	0 = 0 1 = 1 >1 = 2	2
D1_3	MAPS Full	Can most of the cul-de-sac area be seen from participant's home?	No = 0 Yes = 1	1
Overall CulDeSac				
OverallCdSScore_D1	NA	Sum of all item (closeness to participant's home, total amenities, visibility of cul-de-sac area from participant's home)	D1_1_dichot + D1_2_sum_trichot + D1_3	4

Overall Scores and Cross-Domain Subscales

Item	Source	Item Content	Scoring	Points
Overall Scores				
Overall Positive*	NA		DLU_pos + Pos_Streetscape + Pos_AesthSoc	210

			+ Segments_Pos_MEAN + PosCrossChars_MEAN	
Overall Negative*	NA		DLU_neg + Neg_AesthSoc Segment_Neg_MEAN + NegCrossChars_MEAN	22
Overall Grand*	NA		Overall Positive - Overall Negative	
Cross-Domain subscales				
Pedestrian _Infra**	NA	Pedestrian infrastructure subscale (trail, ped zone, sidewalk presence and width, buffer, shortcut, midsegment xing, ped bridge, air conditioned place to walk, low lights, overpass, crosswalk, refuge island)	LU3v + LU3x + S_MEAN_3_recode + S_MEAN_4_recode + S_MEAN_5_recode + S_MEAN_10 + S_MEAN_22 + S_MEAN_23_recode + S_MEAN_24 + S_MEAN_28_dichot + C_MEAN_2 + C_MEAN_7a + C_MEAN_8	27
Pedestrian _Design**	NA	Pedestrian design subscale (open-air market, trash cans, benches, kiosks, hawkers and shops, setback, windows, ped walk signals, push buttons, countdown signals, ramps, crossing aids)	LU4c + SS5a + SS5b + SS5f + S_MEAN_7_trichot + S_MEAN_15_16_points + S_MEAN_21_trichot+ C_MEAN_3a + C_MEAN_3b + C_MEAN_3c + C_MEAN_4a_positive + C_MEAN_4b_positive + C_MEAN_6	22
Bike_facilities**	NA	Bicycle facilities subscale (bike racks, docking stations, lockers, bike lane, bike lane quality, signs, bike signal, bike box, bike lane crossing the xing)	SS5c + SS5d + SS5e + S_MEAN_25_recode + S_MEAN_26_recode + S_MEAN_27 + C_MEAN_3d + C_MEAN_10 + C_MEAN_11	11

* calculated using a mean of all segments & crossings in each route at the subscale level.

** calculated using a mean of all segments & crossings in each route at the item level.