

# Appendix

# Behaviors

**TABLE.** Metrics of ATS Behaviors, Rated by Importance

BEHAVIOR METRIC	Most important for surveillance	Second-most important for surveillance	Third-most important for surveillance
Mode of travel to/from school (n=23)	23	0	0
Individual-level participation in ATS programs (n=23)	0	13	10
Travel party size and composition (n=23)	0	10	13

**TABLE.** Metrics of ATS Behaviors, Rated by Feasibility and Quality

METRIC OF ATS BEHAVIORS, ASSOCIATED METHODS OF MEASUREMENT, AND NUMBER OF SURVEY RESPONDENTS WHO RATED EACH METHOD	FEASIBILITY RATINGS FOR METHODS OF MEASUREMENT			QUALITY RATINGS FOR METHODS OF MEASUREMENT		
	High	Some	Low	High	Some	Low
<b>Mode of travel to/from school (rated as the most important behavior metric for surveillance by 23/23 respondents)</b>						
Estimation (n=21)	14	7	0	11	4	6
Parent-reported survey (n=23)	12	10	1	9	13	1
Child-reported survey (n=23)	11	10	2	5	13	5
School administrator/personnel survey (n=23)	9	14	0	5	14	4
Redemption of transit passes issued to students (n=22)	5	12	5	7	10	4
Direct observation (n=23)	5	12	6	12	9	1
Trip diaries (n=23)	5	12	6	10	12	1
Pedestrian/traffic webcam data (n=21)	1	12	8	6	9	5
GPS-tracked devices (n=23)	11	11	1	16	5	0
<b>Individual-level participation in ATS programs (rated as the second-most important behavior metric for surveillance by 20/23 respondents)</b>						
School administrator/personnel survey (n=23)	14	9	0	8	10	5
Parent-reported survey (n=23)	11	10	2	7	15	1
Child-reported survey (n=23)	8	10	5	3	14	6
Direct observation (n=23)	4	15	4	14	6	3
<b>Travel party size and composition (rated as the third-most important behavior metric for surveillance by 20/23 respondents)</b>						
Trip diaries (n=23)	5	10	8	10	13	0
Parent-reported survey (n=23)	11	11	1	10	12	1
Child-reported survey (n=23)	8	11	4	4	14	5
Direct observation (n=23)	4	13	6	15	7	1

# Environment

**TABLE.** Metrics of ATS Environmental Supports, Rated by Feasibility and Quality

TRAFFIC/ROUTE SAFETY							
Method of measurement (Feasibility)	High	Some	Low	Method of measurement (Quality)	High	Some	Low
Perception of safety along route (n=23)	11	12	0	(n=23)	8	15	0
Crash or “near miss” data during school commuting hours to identify collision hotspots (n=23)	7	13	3	(n=23)	6	11	6
Speed limits near schools (n=23)	19	3	1	(n=23)	10	12	1
Measuring unsafe crossings as potential ATS-limiting segments (n=22)	1	16	5	(n=21)	5	14	2
DISTANCE FROM HOME TO SCHOOL							
Method of measurement (Feasibility)	High	Some	Low	Method of measurement (Quality)	High	Some	Low
Parent-reported survey (n=22)	12	10	0	(n=22)	9	11	2
Child-reported survey (n=22)	5	10	7	(n=22)	0	8	14
Estimated given student home and school address (n=22)	16	6	0	(n=22)	18	3	1
Local school vs. “school of choice” (n=17)	4	10	3	(n=16)	5	7	4
School catchment areas (n=20)	15	5	0	(n=22)	6	11	3
MICRO-SCALE BUILT ENVIRONMENT SUPPORTS							
Method of measurement (Feasibility)	High	Some	Low	Method of measurement (Quality)	High	Some	Low
Objective measures (e.g., Google Street View, audit tools) (n=21)	11	6	4	(n=21)	12	6	3
Perceived measures (survey) (n=21)	9	9	3	(n=21)	7	13	1
MACRO-SCALE BUILT ENVIRONMENT SUPPORTS							
Method of measurement (Feasibility)	High	Some	Low	Method of measurement (Quality)	High	Some	Low
Objective measures (e.g., Google Street View, audit tools) (n=19)	12	4	3	(n=19)	7	11	1
Perceived measures (survey) (n=19)	8	10	1	(n=19)	14	3	2
TIME SPENT TRAVELING TO/FROM SCHOOL							
Method of measurement (Feasibility)	High	Some	Low	Method of measurement (Quality)	High	Some	Low
Parent-reported survey (n=12)	7	4	1	(n=12)	4	8	0
Child-reported survey (n=12)	1	9	2	(n=12)	1	4	7
Estimated given student home and school address (n=12)	3	8	1	(n=11)	4	7	1
Direct observation (n=11)	1	3	7	(n=12)	5	1	5

# Policy and Programs

**TABLE.** Program and Policy Supports for ATS Surveillance, Rated by Importance for Surveillance, Feasibility, and Quality

METRIC OF PROGRAM AND POLICY SUPPORT FOR ATS	# of respondents who chose the metric as one of the five program/policy support metrics of most importance for surveillance	Feasibility Ratings (for the metric itself)			Quality Ratings (for the metric itself)		
		High	Some	Low	High	Some	Low
Adoption of Safe Routes to School and other programs (e.g., remote drop off locations)	20	9	8	2	9	9	1
Zoning/land use policies establishing pedestrian-oriented communities and requiring sidewalks, crosswalk, and bike lanes	18	8	8	1	7	10	0
Adult presence (e.g., crossing guards, corner captains, bike train leaders)	12	5	6	1	6	5	0
Speed zones around schools	11	8	3	0	7	3	0
State funding for AT/ATS programs	9	5	4	0	6	3	0
School busing (eligibility)	8	5	3	0	4	3	1
Complete Streets policies	6	2	4	0	3	3	0
Policies around school siting	6	3	3	0	4	2	0
Car exclusion zones around schools	5	2	3	0	2	3	0
Reach and dose of programs (e.g., one time vs in-depth; demographics of participants)	4	1	3	0	2	2	0
Parental support for using public funds for SRTS-type infrastructure improvements and programs	4	1	1	2	0	3	1
School or district restrictions or prohibitions related to walking and rolling to school	3	2	1	0	1	2	0
Partnerships/engagement between school/district/state and community organizations to support ATS	3	0	3	0	0	3	0
School district wellness policies	2	0	1	0	0	1	0
Transit passes provided to students	1	1	0	0	1	0	0

# Contextual Factors

**TABLE.** Contextual factors that influence ATS behaviors and are most important for surveillance

CONTEXTUAL FACTOR	# of respondents who chose the factor as one of the most importance for surveillance
Parent/family demographics (e.g., employment status, work location, family structure and support, family income/SES)	17
Child demographics (e.g., age, gender, race/ethnicity, one home/two home/home insecure)	16
Parental/family behaviors (e.g., physical activity behaviors including active travel; attitude/buy-in toward those behaviors)	13
Type of school attended (e.g., school of choice, neighborhood school, home school, magnet school)	13
Community culture/norms related to driving and active transportation	10
Violence or crime (along specific route and in the area generally)	10
Parent-reported barriers to ATS	9
Car availability	5
Trauma experience in the home or neighborhood (e.g., historic distrust, police presence)	4
Youth perceptions of experience in transit/enjoyment of physical activity and ATS	4
Child enrollment in before- or after-school care	3
Social cohesion	3
Weather or climate	2
Negative enforcement climate (e.g., jaywalking citations issued to students walking to school and whether they disproportionately affect a particular population)	1
Transit passes provided to students	1