

SUPPORTING INFORMATION CAPTIONS

File S1. Reporting guidelines.

PRISMA 2020 Checklist

Section and Topic	Item #	Checklist Item	Location Where Item is Reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	

Section and Topic	Item #	Checklist Item	Location Where Item is Reported
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
Study characteristics	17	Cite each included study and present its characteristics.	
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	
Certainty of	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	

Section and Topic	Item #	Checklist Item	Location Where Item is Reported
evidence			
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	
	23b	Discuss any limitations of the evidence included in the review.	
	23c	Discuss any limitations of the review processes used.	
	23d	Discuss implications of the results for practice, policy, and future research.	
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	
Competing interests	26	Declare any competing interests of review authors.	
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	

PRISMA 2020 for Abstracts Checklist

Section and Topic	Item #	Checklist item	Reported (Yes/No)
TITLE			
Title	1	Identify the report as a systematic review.	Yes
BACKGROUND			
Objectives	2	Provide an explicit statement of the main objective(s) or question(s) the review addresses.	Yes
METHODS			
Eligibility criteria	3	Specify the inclusion and exclusion criteria for the review.	Yes
Information sources	4	Specify the information sources (e.g. databases, registers) used to identify studies and the date when each was last searched.	Yes
Risk of bias	5	Specify the methods used to assess risk of bias in the included studies.	Yes
Synthesis of results	6	Specify the methods used to present and synthesise results.	Yes

Section and Topic	Item #	Checklist item	Reported (Yes/No)
RESULTS			
Included studies	7	Give the total number of included studies and participants and summarise relevant characteristics of studies.	Yes
Synthesis of results	8	Present results for main outcomes, preferably indicating the number of included studies and participants for each. If meta-analysis was done, report the summary estimate and confidence/credible interval. If comparing groups, indicate the direction of the effect (i.e. which group is favoured).	Yes
DISCUSSION			
Limitations of evidence	9	Provide a brief summary of the limitations of the evidence included in the review (e.g. study risk of bias, inconsistency and imprecision).	Yes
Interpretation	10	Provide a general interpretation of the results and important implications.	Yes
OTHER			
Funding	11	Specify the primary source of funding for the review.	Yes
Registration	12	Provide the register name and registration number.	Yes

Synthesis Without Meta-Analysis (SWiM) Reporting Items

SWiM is intended to complement and be used as an extension to PRISMA			
SWiM reporting item	Item description	Page in manuscript where item is reported	Other*
<i>Methods</i>			
1 Grouping studies for synthesis	1a) Provide a description of, and rationale for, the groups used in the synthesis (e.g., groupings of populations, interventions, outcomes, study design)		
	1b) Detail and provide rationale for any changes made subsequent to the protocol in the groups used in the synthesis		
2 Describe the standardised metric and transformation methods used	Describe the standardised metric for each outcome. Explain why the metric(s) was chosen, and describe any methods used to transform the intervention effects, as reported in the study, to the standardised metric, citing any methodological guidance consulted		

3 Describe the synthesis methods	Describe and justify the methods used to synthesise the effects for each outcome when it was not possible to undertake a meta-analysis of effect estimates		
4 Criteria used to prioritise results for summary and synthesis	Where applicable, provide the criteria used, with supporting justification, to select the particular studies, or a particular study, for the main synthesis or to draw conclusions from the synthesis (e.g., based on study design, risk of bias assessments, directness in relation to the review question)		
SWiM reporting item	Item description	Page in manuscript where item is reported	Other*
5 Investigation of heterogeneity in reported effects	State the method(s) used to examine heterogeneity in reported effects when it was not possible to undertake a meta-analysis of effect estimates and its extensions to investigate heterogeneity		
6 Certainty of evidence	Describe the methods used to assess certainty of the synthesis findings		
7 Data presentation methods	Describe the graphical and tabular methods used to present the effects (e.g., tables, forest plots, harvest plots). Specify key study characteristics (e.g., study design, risk of bias) used to order the studies, in the text and any tables or graphs, clearly referencing the studies included		
<i>Results</i>			
8 Reporting results	For each comparison and outcome, provide a description of the synthesised findings, and the certainty of the findings. Describe the result in language that is consistent with the question the synthesis addresses, and indicate which studies contribute to the synthesis		
<i>Discussion</i>			
9 Limitations of the synthesis	Report the limitations of the synthesis methods used and/or the groupings used in the synthesis, and how these affect the conclusions that can be drawn in relation to the original review question		

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PRISMA=Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

* If the information is not provided in the systematic review, give details of where this information is available (eg, protocol, other published papers (provide citation details), or website (provide the URL)).

ENTREQ checklist (Enhancing transparency in reporting the synthesis of qualitative research)

Item No.	Guide and Description	Report Location
1. Aim	State the research question the synthesis addresses	Introduction
2. Synthesis methodology	Identify the synthesis methodology or theoretical framework which underpins the synthesis, and describe the rationale for choice of methodology (e.g. meta-ethnography, thematic synthesis, critical interpretive synthesis, grounded theory synthesis, realist synthesis, meta-aggregation, meta-study, framework synthesis)	Methodology of synthesis
3. Approach to searching	Indicate whether the search was pre-planned (comprehensive search strategies to seek all available studies) or iterative (to seek all available concepts until they theoretical saturation is achieved)	Study search strategy and process - <i>SPIDER</i>
4. Inclusion criteria	Specify the inclusion/exclusion criteria (e.g. in terms of population, language, year limits, type of publication, study type)	Literature search and selection - <i>Inclusion criteria</i>
5. Data sources	Describe the information sources used (e.g. electronic databases (MEDLINE, EMBASE, CINAHL, psycINFO), grey literature databases (digital thesis, policy reports), relevant organisational websites, experts, information specialists, generic web searches (Google Scholar) hand searching, reference lists) and when the searches conducted; provide the rationale for using the data sources	Study search strategy and process – <i>Electronic searches & searching other resources</i>
6. Electronic Search strategy	Describe the literature search (e.g. provide electronic search strategies with population terms, clinical or health topic terms, experiential or social phenomena related terms, filters for qualitative research, and search limits)	S1 – <i>SPIDER Table of terms and search strategy</i>
7. Study screening methods	Describe the process of study screening and sifting (e.g. title, abstract and full text review, number of independent reviewers who screened studies)	Study selection – <i>Fig 1 PRISMA flow diagram</i>
8. Study characteristics	Present the characteristics of the included studies (e.g. year of publication, country, population, number of participants, data collection, methodology, analysis, research questions)	Table 1 - <i>Characteristics of included studies</i>

9. Study selection results	Identify the number of studies screened and provide reasons for study exclusion (e.g. for comprehensive searching, provide numbers of studies screened and reasons for exclusion indicated in a figure/flowchart; for iterative searching describe reasons for study exclusion and inclusion based on modifications to the research question and/or contribution to theory development)	Fig 1 - PRISMA flow diagram
10. Rationale for appraisal	Describe the rationale and approach used to appraise the included studies or selected findings (e.g. assessment of conduct (validity and robustness), assessment of reporting (transparency), assessment of content and utility of the findings)	Appraisal of the methodological limitations of included studies
11. Appraisal items	State the tools, frameworks and criteria used to appraise the studies or selected findings (e.g. Existing tools: CASP, QARI, COREQ, Mays and Pope [25]; reviewer developed tools; describe the domains assessed: research team, study design, data analysis and interpretations, reporting)	Appraisal of the methodological limitations of included studies - CASP
12. Appraisal process	Indicate whether the appraisal was conducted independently by more than one reviewer and if consensus was required	Appraisal of the methodological limitations of included studies
13. Appraisal results	Present results of the quality assessment and indicate which articles, if any, were weighted/excluded based on the assessment and give the rationale	Appraisal of the methodological limitations of included studies – S2 Table. CASP
14. Data extraction	Indicate which sections of the primary studies were analysed and how were the data extracted from the primary studies? (e.g. all text under the headings “results /conclusions” were extracted electronically and entered into a computer software)	Methodology of synthesis – “ <i>all relevant qualitative data</i> ”
15. Software	State the computer software used, if any	None used
16. Number of reviewers	Identify who was involved in coding and analysis	Methodology of synthesis
17. Coding	Describe the process for coding of data (e.g. line by line coding to search for concepts)	Methodology of synthesis
18. Study comparison	Describe how were comparisons made within and across studies (e.g. subsequent studies were coded	Findings mapped to

	into pre-existing concepts, and new concepts were created when deemed necessary)	<i>Theme Matrix table</i>
19. Derivation of themes	Explain whether the process of deriving the themes or constructs was inductive or deductive	Inductive process - <i>Theme Matrix table</i>
20. Quotations	Provide quotations from the primary studies to illustrate themes/constructs, and identify whether the quotations were participant quotations of the author's interpretation	Findings - <i>Quotations and all sources given</i>
21. Synthesis output	Present rich, compelling and useful results that go beyond a summary of the primary studies (e.g. new interpretation, models of evidence, conceptual models, analytical framework, development of a new theory or construct)	Discussion - <i>highlights the generation and development of theory</i>

File S2. Human Mobility Transition.

Urbanization, economic growth, economic and political power concentration, financialization

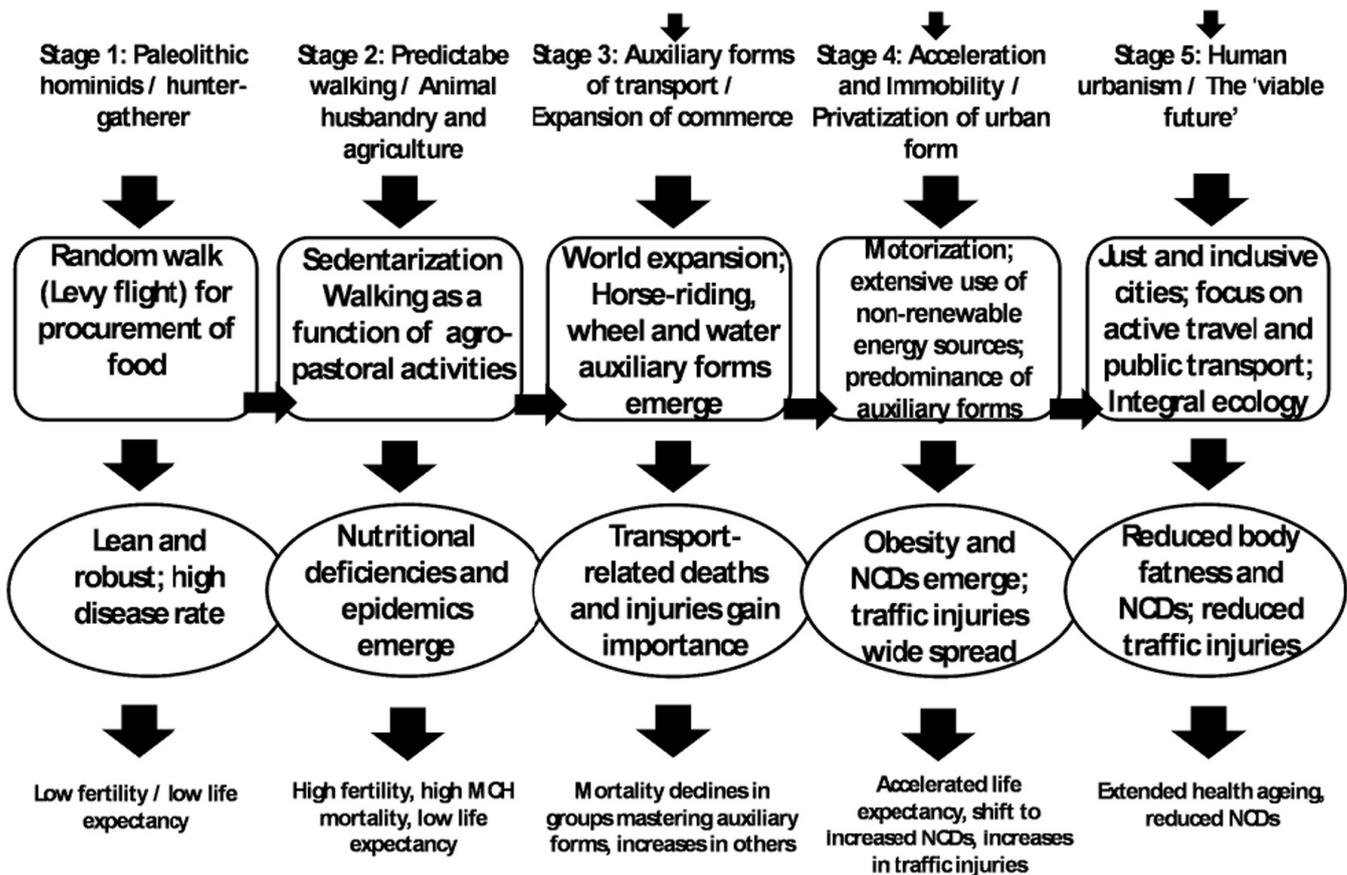


Figure S2. Stages of the Human Mobility Transition.

Reproduced with permission from corresponding author, Thiago Héríck de Sá, in article *Right to the City and Human Mobility Transition: The Case of São Paulo* published by Cities, Elsevier, 2019.

File S3. Eligible countries.

Caribbean countries:		African countries:	
Cuba	United States Virgin Islands	Algeria	Gabon
Haiti	Grenada	Angola	Gambia
Dominican Republic	Antigua	Benin	Ghana
Jamaica	Barbuda	Botswana	Guinea
Trinidad	Dominica	Burkina Faso	Guinea Bissau
Tobago	Cayman Islands	Burundi	Ivory Coast or Cote d Ivoire
Guadeloupe	Saint Kitts	Cameroon	Jamahiriya
Martinique	Nevis	Canary Islands	Kenya
Bahamas	Sint Maarten	Cape Verde	Lesotho
Barbados	Turks	Chad	Liberia
Saint Lucia	Caicos Islands	Comoros	Libya
Curacao	Saint Martin	Congo	Madagascar
Aruba	British Virgin Islands	Djibouti	Malawi
Saint Vincent	Caribbean Netherlands	Egypt	Mali
Grenadines	Anguilla	Equatorial Guinea	Mauritania
Saint Barthelemy	Montserrat	Eritrea	Mauritius
Belize	Bermuda	Ethiopia	Mayotte
Guyana	Suriname	Sao Tome	Senegal
Virgin Islands	Antilles	Seychelles	Sierra Leone
Bonaire	Panama	Somalia	St Helena
Caricom		Sudan	Swaziland
		Tanzania	Togo
		Tunisia	Uganda
		Western Sahara	Zaire
		Zambia	Zimbabwe

File S4. Electronic database search strategies for three databases.

Search strategy for MEDLINE database

Access through Open Athens: MEDLINE - Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily

Exposure

1. determinants or determinant or associations or association or correlation or correlations or influenc*.mp
2. exp Risk Factors/ or risk factor*.mp
3. exp POLICY/ or policy or policies or legislat* or law or laws.mp
4. exp ENVIRONMENT/ or exp ENVIRONMENT DESIGN/ or environment*.mp
5. exhaust fume* or emission*.mp
6. exp Vehicle Emissions/
7. exp Traffic-Related Pollution/
8. infrastructur* or neighbo?rhood or rural or countryside* or suburban or sub-urban or settlement* or village* or urban or town or towns or city or cities or slum or slums or pollutant* or pollution or polluted or (air adj3 quality) or weather or climate.mp
9. exp SOCIAL ENVIRONMENT/ or exp Culture/ or cultur*.mp
10. social network* or psychosocial*.mp
11. exp Ethnic Groups/
12. age or sex or gender or ethnic*.mp
13. exp Age Factors/
14. exp Sex/ or exp Sex Factors/
15. exp Demography/ or demograph*.mp
16. exp SOCIOECONOMIC FACTORS/ or socioeconomic* or socio-economic*.mp
17. exp Employment/
18. exp Social Networking/
19. education or qualifi* or profession* or unskilled or skilled or income* or wage or wages or salary or salaries or occupation* or job or jobs or employ* or unemploy* or price* or cost*.mp

20. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19

Outcome

21. exp Transportation/ or transport* or travel* or traffic or transit or paratransit or para-transit or commut*.mp

22. exp Transportation/ and mobility.mp

23. "active mode" or "active modes".mp

24. "sedentary mode" or "sedentary modes".mp

25. exp Walking/ or walk* or pedestrian*.mp

26. exp Bicycling/ or bike or bikes or bicycle or bicycling or bicyclist or biking.mp

27. exp MOTOR VEHICLES/ or automobile* or taxi or taxis or truck or trucks.mp

28. subway or subways or underground or metro or train or trains or rail* or tram or trams or bus or buses or busses or minibus* or minivan*.mp

29. motor-cycl* or motorcycl* or motor-bik* or motorbik* or scooter* or moped* or moto or motocycl* or motocicl*.mp

30. rickshaw* or auto-rickshaw* or autorickshaw* or "two-wheeler*".mp

31. boat* or ferry or ferries.mp

32. matatu or tuktuk* or tuk-tuk* or bodaboda* or boda-boda*.mp

33. "International Physical Activity Questionnaire*" or IPAQ or "Global Physical Activity Questionnaire*" or GPAQ.mp

34. domain adj3 physical activity.mp

35. pattern* adj3 physical activity.mp

36. 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35

Population

37. Developing Countries/

38. (developing or "less* developed" or "under-developed" or underdeveloped or middle-income or low-income or lower-income or underserved or "under-served" or deprived or poor*) adj (countr* or nation* or population* or world).mp

39. (developing or "less* developed" or "under-developed" or underdeveloped or middle-income or low-income or lower-income or underserved or "under-served" or deprived or poor*) adj (economy or economies).mp
40. low* adj (gdp or gnp or "gross domestic" or "gross national").mp
41. low* adj3 middle adj3 countr*.mp
42. lmic or lmic3 or "third world" or "lami countr*".mp
43. "transitional countr*".mp
44. Africa or African or Caribbean or "West Indies".mp
45. exp Africa/ or exp Caribbean Region or exp West Indies/
46. Algeria or Angola or Benin or Botswana or "Burkina Faso" or Burundi or Cameroon or "Canary Islands" or "Cape Verde" or Chad or Comoros or Congo or Djibouti or Egypt or "Equatorial Guinea" or Eritrea or Ethiopia or Gabon or Gambia or Ghana or Guinea or Guinea Bissau or "Ivory Coast" or "Cote d'Ivoire" or Jamahiriya or Kenya or Lesotho or Liberia or Libya or Madagascar or Malawi or Mali or Mauritania or Mauritius or Mayotte or Morocco or Mozambique or Namibia or Niger or Nigeria or Principe or Reunion or Rwanda or "Sao Tome" or Senegal or Seychelles or "Sierra Leone" or Somalia or "St Helena" or Sudan or Swaziland or Tanzania or Togo or Tunisia or Uganda or "Western Sahara" or Zaire or Zambia or Zimbabwe.mpl
47. Cuba or Haiti or "Dominican Republic" or "Puerto Rico" or Jamaica or Trinidad or Tobago or Guadeloupe or Martinique or Bahamas or Barbados or "Saint Lucia" or Curacao or Aruba or "Saint Vincent" or Grenadines or "United States Virgin Islands" or Grenada or Antigua or Barbuda or Dominica or "Cayman Islands" or "Saint Kitts" or Nevis or "Sint Maarten" or Turks or "Caicos Islands" or "Saint Martin" or "British Virgin Islands" or "Caribbean Netherlands" or Anguilla or "Saint Barthelemy" or Montserrat or Belize or Bermuda or Guyana or Suriname or "Virgin Islands" or Antilles or Bonaire or Panama or Caricom.mpl
48. 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47
49. 20 and 36 and 48
50. HIV or "human immunodeficiency virus" or tuberculosis or TB or ebola or zika or malaria or pregnancy or pregnant or matern* or obstetric* or abortion or contracept* or midwife or midwives or postnatal or "sexual health" or "reproductive health".mp
51. 49 NOT 50
52. limit 51 to (yr="2008 -Current")
53. limit 52 to (male or female or humans)

Search strategy for TRID database

Access through: <https://trid.trb.org/>:

TRID - CUSTOM FILTERS: between dates 2008 - 2019 (An expanded search was done for each Index Term used)

Exposure

1. (Keywords) determinants or determinant or associations or association or correlation or correlations or influenc*
2. (Keywords) "risk factor*"
3. (Index Term) Policy --> (Keywords) NN:Cra*
4. (Keywords) policy or policies or legislat* or law or laws
5. (Index Term) Environment, Environmental design, Built environment --> (Keywords) NN:J* or NN:Ttn* or NN:Eb*
6. (Keywords) environment*
7. (Keywords) "exhaust fume*" or emission*
8. (Keywords) "vehicle emissions"
9. (Keywords) "traffic-related pollution"
10. (Keywords) infrastructur* or neighbourhood or neighborhood or rural or countryside* or suburban or sub-urban or settlement* or village* or urban or town or towns or city or cities or slum or slums or pollutant* or pollution or polluted or weather or climate
11. (Keywords) "Air quality"
12. (Index Term) Culture (Social sciences) --> (Keywords) NN:Khr*
13. (Keywords) cultur*
14. (Keywords) "social network*" or psychosocial*
15. (Keywords) age or sex or gender or ethnic*
16. (Index Term) Age Groups --> (Keywords) NN:Mb*
17. (Index Term) Ethnic Groups --> (Keywords) NN:Mha*
18. (Index Term) Population --> (Keywords) NN:Khb*
19. (Keywords) demograph*

20.(Index Term) Socioeconomic factors --> (Keywords) NN:Kj*

21.(Keywords) socioeconomic* or socio-economic*

22.(Index Term) Employment --> (Keywords) NN:Kabkp*

23.(Keywords) education or qualifi* or profession* or unskilled or skilled or income* or wage or wages or salary or salaries or occupation* or job or jobs or employ* or unemploy* or price* or cost*

24. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 18 or 20 or 21 or 22 or 23

Outcome

25. (Index Term) Transportation --> (Keywords) NN:A

26. (Keywords) transport* or travel* or traffic or transit or paratransit or para-transit or commut*

27. (Index Term) Transportation --> (Keywords) NN:A AND mobility

28. (Keywords) "active mode" or "active modes"

29. (Keywords) "sedentary mode" or "sedentary modes"

30. (Index Term) Walking, Walking distance --> (Keywords) NN:Aexw* or NN:Bxw*

31. (Keywords) walk* or pedestrian*

32. (Index Term) Bicycling --> (Keywords) NN:Aexb*

33. (Keywords) bicycling or cycle or cycles or bike or bikes or bicycle or bicyclist or biking

34. (Index Term) Motor vehicles --> (Keywords) NN:Qbdd*

35. (Keywords) automobile* or taxi or taxis or truck or trucks or car or cars

36. (Keywords) subway or subways or underground or metro or train or trains or rail* or tram or trams or bus or buses or busses or minibus* or minivan*

37. (Keywords) motor-cycl* or motorcycl* or motor-bik* or motorbik* or scooter* or moped* or moto or motocycl* or motocicl*

38. (Keywords) rickshaw* or auto-rickshaw* or autorickshaw* or two-wheeler*

39. (Keywords) boat* or ferry or ferries

40. (Keywords) matatu or tuktuk* or tuk-tuk* or bodaboda* or boda-boda*

41. (Keywords) "International Physical Activity Questionnaire*" or IPAQ or "International Physical Activity Questionnaire*" or "Global Physical Activity Questionnaire*" or GPAQ or "Global Physical Activity Questionnaire*"
42. (Keywords) domain* and "physical activity"
43. (Keywords) pattern* and "physical activity"
44. 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43
- Population
45. (Index Term) Developing countries --> (Keywords) NN:Vwad*
46. (Keywords) "developing countr*" or "less* developed countr*" or "under-developed countr*" or "underdeveloped countr*" or "middle-income countr*" or "low-income countr*" or "lower-income countr*" or "underserved countr*" or "under-served countr*" or "deprived countr*" or "poor* countr*"
47. (Keywords) "developing nation*" or "less* developed nation*" or "under-developed nation*" or "underdeveloped nation*" or "middle-income nation*" or "low-income nation*" or "lower-income nation*" or "underserved nation*" or "under-served nation*" or "deprived nation*" or "poor* nation*"
48. (Keywords) "developing population*" or "less* developed population*" or "under-developed population*" or "underdeveloped population*" or "middle-income population*" or "low-income population*" or "lower-income population*" or "underserved population*" or "under-served population*" or "deprived population*" or "poor* population*"
49. (Keywords) "developing world" or "less* developed world" or "under-developed world" or "underdeveloped world" or "middle-income world" or "low-income world" or "lower-income world" or "underserved world" or "under-served world" or "deprived world" or "poor* world"
50. (Keywords) "developing econom*" or "less* developed econom*" or "under-developed econom*" or "underdeveloped econom*" or "middle-income econom*" or "low-income econom*" or "lower-income econom*" or "underserved econom*" or "under-served econom*" or "deprived econom*" or "poor* econom*"
51. (Keywords) "low* gdp"
52. (Keywords) "low* gnp"
53. (Keywords) "low* gross domestic"
54. (Keywords) "low* gross national"
55. (Keywords) "low* middle" and count*
56. (Keywords) lmic or lmic* or "third world" or "lami countr*"
57. (Keywords) "transitional countr*"
58. (Keywords) Africa or African or Caribbean or "West Indies"

59. (Keywords) Algeria or Angola or Benin or Botswana or "Burkina Faso" or Burundi or Cameroon or "Canary Islands" or "Cape Verde" or Chad or Comoros or Congo or Djibouti or Egypt or "Equatorial Guinea" or Eritrea or Ethiopia or Gabon or Gambia or Ghana or Guinea or Guinea Bissau or "Ivory Coast" or "Cote d'Ivoire" or Jamahiriya or Jamahiriya or Kenya or Lesotho or Liberia or Libya or Madagascar or Malawi or Mali or Mauritania or Mauritius or Mayotte or Morocco or Mozambique or Namibia or Niger or Nigeria or Principe or Reunion or Rwanda or "Sao Tome" or Senegal or Seychelles or "Sierra Leone" or Somalia or "St Helena" or Sudan or Swaziland or Tanzania or Togo or Tunisia or Uganda or "Western Sahara" or Zaire or Zambia or Zimbabwe

60. (Keywords) Cuba or Haiti or "Dominican Republic" or "Puerto Rico" or Jamaica or Trinidad or Tobago) or Guadeloupe or Martinique or Bahamas or Barbados or "Saint Lucia" or Curacao or Aruba or "Saint Vincent" or Grenadines or "United States Virgin Islands" or Grenada or Antigua or Barbuda or Dominica or "Cayman Islands" or "Saint Kitts" or Nevis or "Sint Maarten" or Turks or "Caicos Islands" or "Saint Martin" or "British Virgin Islands" or "Caribbean Netherlands" or Anguilla or "Saint Barthelemy" or Montserrat or Belize or Bermuda or Guyana or Suriname or "Virgin Islands" or Antilles or Bonaire or Panama or Caricom

61. 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60

62. HIV or "human immunodeficiency virus" or tuberculosis or TB or ebola or zika or malaria or pregnancy or pregnant or matern* or obstetric* or abortion or contracept* or midwife or midwives or postnatal or "sexual health" or "reproductive health"

63. (24 and 44 and 61) NOT 62

***** no other limits applied *****

Search strategy for SCOPUS database

Access through: Cambridge LibGuides

Exposure

1. TITLE-ABS-KEY determinant or association or correlation or influenc*
2. TITLE-ABS-KEY "risk factor"
3. TITLE-ABS-KEY policy or legislat* or law
4. TITLE-ABS-KEY environment*
5. TITLE-ABS-KEY "exhaust fume" or emission
6. TITLE-ABS-KEY "vehicle emission"
7. TITLE-ABS-KEY "traffic-related pollution"

8. TITLE-ABS-KEY infrastru* or neighborhood or rural or countryside or suburban or sub-urban or settlement or village or urban or town or city or slum or pollutant or pollution or polluted or (air w/3 quality) or weather or climate

9. TITLE-ABS-KEY "social environment" or cultur*

10. TITLE-ABS-KEY "social network*" or psychosocial*

11. TITLE-ABS-KEY age or sex or gender or ethnic*

12. TITLE-ABS-KEY demograph*

13. TITLE-ABS-KEY socioeconomic*

14. TITLE-ABS-KEY education or qualifi* or profession* or unskilled or skilled or income* or wage or salary or occupation* or job or employ* or unemploy* or price* or cost*

15. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14

Outcome

16. TITLE-ABS-KEY transport* or travel* or traffic or transit or paratransit or commut*

17. TITLE-ABS-KEY transportation AND mobility

18. TITLE-ABS-KEY {active mode} or {active modes}

19. TITLE-ABS-KEY {sedentary mode} or {sedentary modes}

20. TITLE-ABS-KEY walk* or pedestrian*

21. TITLE-ABS-KEY bike or bicycle or bicycling or bicyclist or biking

22. TITLE-ABS-KEY "motor vehicle" or automobile or taxi or truck

23. TITLE-ABS-KEY subway or underground or metro or train or rail* or tram or bus or minibus* or minivan*

24. TITLE-ABS-KEY motor-cycl* or motorcycl* or motor-bik* or motorbik* or scooter* or moped* or moto or motocycl* or motocicl*

25. TITLE-ABS-KEY rickshaw* or auto-rickshaw* or autorickshaw* or two-wheeler*

26. TITLE-ABS-KEY boat* or ferry

27. TITLE-ABS-KEY matatu or tuktuk* or "tuk-tuk*" or bodaboda* or "boda-boda"

28. TITLE-ABS-KEY "International Physical Activity Questionnaire*" or IPAQ or "Global Physical Activity Questionnaire*" or GPAQ

29. TITLE-ABS-KEY domain w/3 "physical activity"

30. TITLE-ABS-KEY pattern* w/3 "physical activity"

31. 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30

Population

32. TITLE-ABS-KEY (developing or "less* developed" or "under developed" or underdeveloped or "middle-income" or "low*-income" or underserved or "under-served" or deprived or poor*) pre/1 (countr* or nation* or population* or world)

33. TITLE-ABS-KEY (developing or "less* developed" or "under developed" or underdeveloped or "middle-income" or "low*-income" or underserved or "under-served" or deprived or poor*) pre/1 (economy or economies)

34. TITLE-ABS-KEY low* pre/1 (gdp or gnp or {gross domestic} or {gross national})

35. TITLE-ABS-KEY low* w/3 middle w/3 countr*

36. TITLE-ABS-KEY lmic or lmic or {third world} or "lami countr*"

37. TITLE-ABS-KEY "transitional countr*"

38. TITLE-ABS-KEY Africa or African or Caribbean or {West Indies}

39. TITLE-ABS-KEY (Algeria or Angola or Benin or Botswana or {Burkina Faso} or Burundi or Cameroon or {Canary Islands} or {Cape Verde} or Chad or Comoros or Congo or Djibouti or Egypt or {Equatorial Guinea} or Eritrea or Ethiopia or Gabon or Gambia or Ghana or Guinea or {Guinea Bissau} or {Ivory Coast} or {Cote dIvoire} or Jamahiriya or Kenya or Lesotho or Liberia or Libya or Madagascar or Malawi or Mali or Mauritania or Mauritius or Mayotte or Morocco or Mozambique or Namibia or Niger or Nigeria or Principe or Reunion or Rwanda or {Sao Tome} or Senegal or Seychelles or {Sierra Leone} or Somalia or {St Helena} or Sudan or Swaziland or Tanzania or Togo or Tunisia or Uganda or {Western Sahara} or Zaire or Zambia or Zimbabwe)

40. TITLE-ABS-KEY (Cuba or Haiti or {Dominican Republic} or {Puerto Rico} or Jamaica or Trinidad or Tobago or Guadeloupe or Martinique or Bahamas or Barbados or {Saint Lucia} or Curacao or Aruba or {Saint Vincent} or Grenadines or {United States Virgin Islands} or Grenada or Antigua or Barbuda or Dominica or {Cayman Islands} or {Saint Kitts} or Nevis or {Sint Maarten} or Turks or {Caicos Islands} or {Saint Martin} or {British Virgin Islands} or {Caribbean Netherlands} or Anguilla or {Saint Barthelemy} or Montserrat or Belize or Bermuda or Guyana or Suriname or {Virgin Islands} or Antilles or Bonaire or Panama or Caricom)

41. 32 or 33 or 34 or 35 or 36 or 37 or 38 or 30 or 40

42. 15 and 31 and 41

43. 42 AND NOT (TITLE-ABS-KEY (HIV or {human immunodeficiency virus} or tuberculosis or TB or ebola or zika or malaria or pregnancy or pregnant or matern* or obstetric* or abortion or contracept* or midwife or postnatal or {sexual health} or {reproductive health}))

44. limit 43 to (yr="2008 -Current")

45. With limit to male or female or humans

File S5. Data extraction template.

Field	Standard or custom Covidence field	Format	Notes
Identification			
Study details			
Sponsorship source	Standard	Free text	<p>Check whether a funding source is reported. Often this can be found in a section titled 'Acknowledgements' or 'Funding' or reported on the first page of the manuscript near the author information.</p> <p>Enter the funding source If more than one, list separated by a comma Otherwise enter 'no source reported'</p> <p><i>Example</i> Medical Research Council, Heart Foundation</p>
Country	Standard	Free text	<p>Enter the country where the data were collected If more than one, list separated by a comma</p> <p><i>Example</i> Ghana</p>
Setting	Standard	Free text	<p>Enter the setting where the data were collected If more than one, list separated by a comma If information given at different levels of geographical aggregation (e.g. region, city, district), list all this information and where possible give information on the level of aggregation in brackets</p> <p><i>Example</i> Accra, Kumasi, Tamale, Sekondi-Takoradi (metropolitan areas)</p>
Comments	Standard	Free text	Leave this field blank or use for general comments/queries arising
Author's contact details			
Author's name	Standard	Free text	<p>Enter the name of the first author Use the format [surname, initials]</p> <p><i>Example</i> Abane, AB</p>
Institution	Standard	Free text	<p>Enter the institution or affiliation of the first author with the country of this affiliation in brackets If more than one, list separated by a comma</p> <p><i>Example</i> University of Cape Coast (Ghana)</p>
Email	Standard	Free text	<p>Enter the email address of the first author If none provided enter 'email not provided'</p>

			<i>Example</i> am_abane@yahoo.com
Address	Standard	Free text	Leave this field blank
Additional identification data			
Country - first author	Custom	Free text	Enter the country where the first author's institution or affiliation is located If more than one, list the country of the first affiliation <i>Example</i> Kenya
Country - last author	Custom	Free text	Enter the country where the last author's institution or affiliation is located If more than one, list the country of the first affiliation If the study has only one author, enter 'no last author' <i>Example</i> United States of America
Data source	Custom	Free text Categorical	Enter the source of the data Use the following categories: If more than one, list separated by a comma <ul style="list-style-type: none"> • Academic • Research Institute/Centre • Government • Private sector • International organisation • NGO • Other Academic: research studies led by universities Research Institute/Centre: research studies led by research groups which are part of a larger institution such as universities, hospitals, corporations, etc. Government: routine monitoring such as national surveys or traffic monitoring Private sector: research studies led by industry, private companies, consultancy firms, etc. International organisation: research studies led by organisations such as WHO, World Bank, FAO, UN, etc. NGO: research studies led by non-profit, non-governmental organisations Other: enter other type of source of data not listed above <i>Example</i> Academic, Research Institute/Centre, International organisation

Date - data collection	Custom	Free text	<p>Enter the start and end year of data collection</p> <p>If data collection was completed within one year, enter the year only</p> <p>If one discrete period of data collection spanned multiple years, enter the start and end year separated by a dash</p> <p>If there were multiple discrete periods of data collection (e.g. in a longitudinal cohort that had a baseline and follow-up data collection), enter the years separated by a comma</p> <p><i>Examples</i></p> <p>2014</p> <p>2014-2015 (one discrete period of data collection)</p> <p>2014, 2017 (multiple periods of data collection e.g. cohort)</p> <p>2015-2015, 2017-2018 (multiple periods of data collection, each spanning multiple years)</p>
Date - publication	Custom	Free text	<p>Enter the year that the study was published</p> <p><i>Example</i></p> <p>2014</p>
GDAR - work package 1b	Custom	Free text	<p>Enter 'WP1flag' if the study uses spatial assessment, or provides information on transportation patterns, physical activity patterns, road traffic accidents, air pollution, demographics or health outcomes</p> <p>Otherwise enter 'none'</p>
GDAR - work package 3	Custom	Free text	<p>Enter 'WP3flag' if the study refers to policy in South Africa, Kenya, Cameroon or Jamaica, and provides information on the sector of origin of the policy such as health or transport</p> <p>Otherwise enter 'none'</p>
Equity	Custom	Free text	<p>Enter 'equityflag' if the study explores gender or sex differences in travel behaviour, or differences by socioeconomic status to inform an equity analysis</p> <p>Otherwise enter 'none'</p>
Methods			
Design			Leave this field blank
Additional methods data			
A. Research type	Standard	Categorical	<p>Enter the research type:</p> <p>Use ONE of the following categories:</p> <ul style="list-style-type: none"> • Quantitative • Qualitative • Mixed method <p>Quantitative: measures of values or counts expressed as numbers e.g. the data generated from surveys, questionnaires, measurements</p> <p>Qualitative: description of phenomena often expressed as text e.g. interviews, focus groups</p> <p>Mixed method: Both quantitative and qualitative methods used</p>
B. Study design - quantitative	Custom	Free text Categorical	Enter the study design.

			<p>Quantitative or mixed method study - use ONE of the following categories:</p> <ul style="list-style-type: none"> • Randomised controlled trial • Cohort study • Case-control study • Cross sectional study • Case report / Case study • Other – please, specify <p>For quantitative or mixed method studies, complete this field. Otherwise (i.e. for qualitative studies) enter ‘not applicable’</p>
C. Study design - qualitative	Custom	Free text Categorical	<p>Enter the study design.</p> <p>Qualitative or mixed method study – use ONE of the following categories:</p> <ul style="list-style-type: none"> • Grounded theory • Case study • Historical / Narratives • Participatory research / Action research • Phenomenology • Ethnography / Observation • Other – please, specify <p>Ethnography: Immersion of the researcher the participants’ environment, typically through observation (note, do not confuse this design with observational quantitative designs like traffic counting)</p> <p>For qualitative or mixed method studies, complete this field. Otherwise (i.e. for quantitative studies) enter ‘not applicable’</p>
D. Study method – quantitative	Custom	Free text	<p>If the study includes a quantitative element, enter the method type.</p> <p>Enter a small amount of free text summarising the study methods. This can usually be cut and pasted from the abstract.</p> <p><i>Examples</i> Two-day vox pop survey, structured questionnaire at two main trip destinations STEPs survey Household survey and interview</p> <p>For quantitative or mixed method studies, complete this field. Otherwise (i.e. for qualitative studies) enter ‘not applicable’</p>
E. Study method - qualitative	Custom	Free text Categorical	<p>If the study includes a qualitative element, enter the method type.</p> <p>Use the following categories: If more than one, list separated by a comma</p>

			<ul style="list-style-type: none"> • Structured – interview , survey, questionnaire • Un-structured or Semi structured - interview , survey, questionnaire • In depth- interview / Key informants • Focus groups / Group discussions • Field Notes • Narrative descriptions • Audio tapes • Video tapes • Seasonal calendars • Transect walks • Participatory mapping / Modelling • Other– please, enter a small amount of free text summarising the study methods. <p>For qualitative or mixed method studies, complete this field. Otherwise (i.e. for quantitative studies) enter 'not applicable'</p>
F. Exposure category	Custom	Free text Categorical	<p>Enter ALL of the categories of exposure that were assessed in the study.</p> <p>Use the following categories: If more than one, list separated by a comma</p> <ul style="list-style-type: none"> • Individual characteristics • Travel mode characteristics • Built environment • Natural environment • Socio-cultural environment • Policy or wider environment <p>See the 'Categories of exposure' (Table 1) in this document to help you decide which exposures should be listed.</p> <p>Exposures must be linked explicitly with travel behaviour outcomes, not just reported. E.g. A study might report the sex distribution of the sample (i.e. numbers of males and females), but to be considered an exposure the study needs to have examined how travel behaviour varies by sex (e.g. whether public transport use differs between males and females). For this example, the following category should be entered: 'Individual characteristics'.</p>
G. Exposure/s	Custom	Free text	Enter all of the exposures that were assessed in the study. See Table 1 to help you decide how to report exposures.
H. Exposure methods	Custom	Free text Categorical	<p>Enter ONE of the methods of exposure that were assessed in the study:</p> <ul style="list-style-type: none"> • Subjective • Objective

			<ul style="list-style-type: none"> • Both subjective and objective <p>Subjective: Usually this means the participant has self-reported Objective: Observed by the researcher. For example, measured population density using census data, measured land use mix using geographical information systems</p>
I. Outcome/s	Custom	Free text Categorical	<p>Enter ALL of the following outcomes that were assessed in the study: Enter all outcomes assessed from this list, separated by a comma.</p> <ul style="list-style-type: none"> • Time in all travel • Time in active travel • Time in travel modes or combinations of modes • Number of trips/journeys • Use of travel modes • Choice of travel modes • Travel mode share • Mobility budget (percentage) • Purpose of travel mode use • Other – please, specify <p>Active travel is commonly operationalised as walking only, cycling only, walking and cycling combined, or walking, cycling and public transport combined Enter all outcomes assessed from this list, separated by a comma</p> <p><i>Example</i> Time in all travel, time in active travel</p>
J. Outcome methods	Custom	Free text Categorical	<p>Enter ONE of the methods of outcome that were assessed in the study:</p> <ul style="list-style-type: none"> • Subjective • Objective • Both subjective and objective <p>Subjective: Usually this means the participant has self-reported Objective: Observed by the researcher. For example, counting people using particular travel modes</p>
K. Analysis method - quantitative	Custom	Free text	<p>Enter a small amount of free text summarising the analysis methods. For quantitative studies it is important to distinguish between basic statistical methods for assessing relationships (e.g. correlations) and those that account for potential confounding factors (e.g. multivariable regression modelling).</p> <p>For quantitative or mixed method studies, complete this field. Otherwise (i.e. for qualitative studies) enter 'not applicable'</p>

L. Analysis method - qualitative	Custom	Free text	<p>Enter a small amount of free text summarising the analysis methods, e.g. thematic analysis.</p> <p>For qualitative or mixed method studies, complete this field. Otherwise (i.e. for quantitative studies) enter 'not applicable'</p>
Population			
Inclusion criteria	Standard	Free text	<p>Enter a small amount of free text summarising the types of participants included in the study. This can usually be cut and pasted from the article.</p> <p><i>Example</i> Data were collected from passengers waiting to board or actually on board vehicles operated by privately-owned and government-assisted transport systems in the four metropolitan areas under study.</p>
Exclusion criteria	Standard	Free text	<p>Enter a small amount of free text summarising the types of participants excluded from the study. This can usually be cut and pasted from the article.</p> <p>In many cases, there will be no explicit exclusion criteria listed. If this is the case, enter 'not reported'.</p> <p><i>Example</i> Institutionalised individuals (e.g. hospitalised or jailed) were excluded from the study Participants with a diagnosis of cancer were excluded</p>
Group differences	Standard	Free text	<p>Enter a small amount of free text summarising whether there were any differences between participant groups at baseline. This only applies to studies that used a controlled experimental design (and it is likely that the majority of literature identified will not use this type of design). This can usually be cut and pasted from the article.</p> <p>If this does not apply, enter 'not applicable'.</p>
Additional population data			
1. Sample size	Custom	Free text	<p>Enter a small amount of free text describing the sample size</p> <p><i>Examples</i> 10,128 individuals 100 households, 1 member of each household Ouagadougou - 754 households, 3682 individuals, Bamako - 251 households, 1666 individuals</p>
2. Response rate	Custom	Free text	<p>Enter a small amount of free text describing the response rate, if provided. If reported, this is typically expressed as a percentage. It is likely that many studies will not provide this information.</p> <p>If not reported, enter 'not reported'</p> <p><i>Example</i></p>

			78% response rate
3. Age	Custom	Free text	<p>Enter a small amount of free text describing the age of participants. If possible, enter this in the format 'mean (standard deviation)'. Other common reporting formats are a range, or the proportion of participants that fall within a particular age range.</p> <p>If not reported, enter 'not reported'</p> <p><i>Examples</i> 45.3 (2.1) years 15-60 years 48% of participants were aged 30-44 years Over 13 years</p>
4. Sex	Custom	Free text	<p>Enter a small amount of free text describing the sex of participants. If possible, enter this in the form 'number (percentage)'</p> <p>If not reported, enter 'not reported'</p> <p><i>Examples</i> 100 (25%) female; 300 (75%) male 55% female Female only</p>
5. Urban/rural	Custom	Free text	<p>Enter a small amount of free text describing the urban/rural status of participants</p> <p>If not reported, enter 'not reported'</p> <p><i>Examples</i> Rural Urban Urban and peri-urban dwellers</p>
6. Direction of relationships	Custom	Free text	<p>Enter a small amount of free text summarising the direction of the relationships found between exposures and outcomes. Try to keep this as succinct as possible, although it is likely that some studies will report a large number of relationships. Do not worry about reporting the size of the relationship.</p> <p><i>Examples</i> Women travelled less than men Where new roads were built, car traffic increased</p>
7. Main idea	Custom	Free text	<p>Imagine you would like to summarise the article to a colleague in few sentences. What would you tell him/her?</p> <p>Try to get the main idea of the article. Limit your answer to 1 paragraph containing 3 to 5 sentences (maximum)</p>
Baseline characteristics			
Interventions			Do not enter data in this section
Outcomes			Do not enter data in this section

Categories of exposure

Exposure category	Examples
Individual characteristics	Age Sex Ethnicity Urban vs. rural dweller Slum dweller Country, region or area of residence Socioeconomic status Household factors (e.g. size, assets) Employment status Mobility budget (e.g. the share of income spent on public transport) Education level Occupation Income Marital status Vehicle ownership (e.g. car or motorbike) Bike ownership Hold driving license Ability to cycle Attitude towards particular travel modes Knowledge about travel modes Distance needed to travel (e.g. to place of work) Lifestyle Health status
Travel mode characteristics	Safety (e.g. road traffic accidents, injuries or fatalities) Crime (e.g. interpersonal violence, harassment, mugging) Cost Comfort Customer service Accessibility Availability of services Availability of space Speed (e.g. traffic jam, delays) Security Price stability
Built environment	Population density/urban sprawl Land use mix Street connectivity City layout (e.g. shops or other community destinations all clustered in city centre) Transport infrastructure (e.g. provision of paved roads, public transport, footpaths/cycling paths or infrastructure that protects vulnerable users) Sidewalk or street-crossing quality Cycle path quality Street lighting Speed management infrastructure General levels of traffic Green space Pollution or air quality Aesthetics (e.g. pleasantness of area) Incivilities (e.g. crime, litter, upkeep of area, traffic noise)

	Note: This includes individuals' perceptions of the built environment as well as objective assessments of the built environment
Natural environment	<p>Climate (e.g. rainy vs. dry season, winter vs. summer)</p> <p>Weather (e.g. hot temperatures)</p> <p>Natural disasters</p> <p>Note: This includes individuals' perceptions of the natural environment as well as objective assessments of the natural environment</p>
Socio-cultural environment	<p>Social norms (e.g. family/household member roles, or community values)</p> <p>Gender roles</p> <p>Religious norms</p> <p>Cultural norms</p> <p>Class segregation</p> <p>Stigmatisation/aspiration of particular travel modes (e.g. car seen as indicator of wealth)</p>
Policy or wider environment	<p>Urban planning (e.g. planned vs. unplanned development)</p> <p>Regional or national travel budgets or policies (including policy priorities)</p> <p>Regional or national physical activity policies (including policy priorities)</p> <p>Transport sector regulation/management, including taxes</p> <p>Corruption/mismanagement</p> <p>Economic development (e.g. leading to changing types of occupations)</p> <p>Legacies (e.g. of apartheid or colonisation)</p> <p>Climate/sustainability agenda (including oil crisis)</p> <p>Overseas aid</p> <p>Globalisation</p> <p>International policy priorities</p> <p>War and conflict</p>

File S6. Modified CASP Cohort Study Checklist.

#	Item	Elaboration
Section A: Are the results of the study valid?		
1	<p>Did the study address a clearly focussed issue?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: A question can be 'focused' in terms of:</p> <ul style="list-style-type: none"> ● the population studied ● the risk factors studied ● is it clear whether the study tried to detect a beneficial or harmful effect the outcomes considered
2	<p>Was the cohort/sample recruited in an acceptable way?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Look for selection bias which might compromise the generalisability of the findings:</p> <ul style="list-style-type: none"> ● was the cohort/sample representative of a defined population ● was there something special about the cohort/sample ● was everybody included who should have been
3	<p>Was the exposure accurately measured to minimise bias?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Look for measurement or classification bias:</p> <ul style="list-style-type: none"> ● did they use subjective or objective measurements ● do the measurements truly reflect what you want them to (have they been validated) ● were all the subjects classified into exposure groups using the same procedure
4	<p>Was the outcome accurately measured to minimise bias?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Look for measurement or classification bias:</p> <ul style="list-style-type: none"> ● did they use subjective or objective measurements ● do the measurements truly reflect what you want them to (have they been validated) ● has a reliable system been established for detecting all the cases (for measuring disease occurrence) ● were the measurement methods similar in the different groups ● were the subjects and/or the outcome assessor blinded to exposure (does this matter)
5a	<p>Have the authors identified all important confounding factors?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: list the ones you think might be important, and ones the author missed</p>

5b	Have they taken account of the confounding factors in the design and/or analysis? Yes Can't tell No	HINT: look for restriction in design, and techniques e.g. modelling, stratified-, regression-, or sensitivity analysis to correct, control or adjust for confounding factors
6a	For longitudinal studies: Was the follow up of subjects complete enough? Yes Can't tell No N/A (for cross-sectional studies)	HINT: Consider: <ul style="list-style-type: none"> the good or bad effects should have had long enough to reveal themselves the persons that are lost to follow-up may have different outcomes than those available for assessment in an open or dynamic cohort, was there anything special about the outcome of the people leaving, or the exposure of the people entering the cohort
6b	For longitudinal studies: Was the follow up of subjects long enough? Yes Can't tell No N/A (for cross-sectional studies)	HINT: Consider: <ul style="list-style-type: none"> the good or bad effects should have had long enough to reveal themselves the persons that are lost to follow-up may have different outcomes than those available for assessment in an open or dynamic cohort, was there anything special about the outcome of the people leaving, or the exposure of the people entering the cohort
Section B: What are the results?		
7	What are the results of this study? [free text]	HINT: Consider: <ul style="list-style-type: none"> what are the bottom line results have they reported the rate or the proportion between the exposed/unexposed, the ratio/rate difference how strong is the association between exposure and outcome (RR) what is the absolute risk reduction (ARR)
8	How precise are the results? [free text]	HINT: look for the range of the confidence intervals, if given
9	Do you believe the results? Yes Can't tell	HINT: Consider: <ul style="list-style-type: none"> big effect is hard to ignore can it be due to bias, chance or confounding are the design and methods of this study sufficiently flawed to make the results unreliable

	No	<ul style="list-style-type: none"> Bradford Hills criteria (e.g. time sequence, dose-response gradient, biological plausibility, consistency)
Section C: Will the results help locally?		
10	<p>Can the results be applied to the local population?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider whether:</p> <ul style="list-style-type: none"> a cohort/cross-sectional study was the appropriate method to answer this question the subjects covered in this study could be sufficiently different from your population to cause concern your local setting is likely to differ much from that of the study you can quantify the local benefits and harms
11	<p>Do the results of this study fit with other available evidence?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	
12	<p>What are the implications of this study for practice?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> one observational study rarely provides sufficiently robust evidence to recommend changes to clinical practice or within health policy decision making for certain questions, observational studies provide the only evidence recommendations from observational studies are always stronger when supported by other evidence

File S7. Modified CASP Qualitative Checklist.

#	Item	Elaboration
Section A: Are the results of the study valid?		
1	<p>Was there a clear statement of the aims of the research?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> ● what was the goal of the research ● why it was thought important ● its relevance
2	<p>Is a qualitative methodology appropriate?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> ● If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants ● Is qualitative research the right methodology for addressing the research goal
3	<p>Was the research design appropriate to address the aims of the research?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> ● if the researcher has justified the research design (e.g. have they discussed how they decided which method to use)
4	<p>Was the recruitment strategy appropriate to the aims of the research?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> ● If the researcher has explained how the participants were selected: ● If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study ● If there are any discussions around recruitment (e.g. why some people chose not to take part)
5	<p>Was the data collected in a way that addressed the research issue?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> ● If the setting for the data collection was justified ● If it is clear how data were collected (e.g. focus group, semi-structured interview etc.) ● If the researcher has justified the methods chosen ● If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews are conducted, or did they use a topic guide) ● If methods were modified during the study. If so, has the researcher explained how and why

		<ul style="list-style-type: none"> • If the form of data is clear (e.g. tape recordings, video material, notes etc.) • If the researcher has discussed saturation of data
6	<p>Has the relationship between researcher and participants been adequately considered?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> • If the researcher critically examined their own role, potential bias and influence during (a) formulation of the research questions (b) data collection, including sample recruitment and choice of location • How the researcher responded to events during the study and whether they considered the implications of any changes in the research design
Section B: What are the results?		
7	<p>Have ethical issues been taken into consideration?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> • If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained • If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study) • If approval has been sought from the ethics committee
8	<p>Was the data analysis sufficiently rigorous?</p> <p>Yes</p> <p>Can't tell</p> <p>No</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> • If there is an in-depth description of the analysis process • If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data • Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process • If sufficient data are presented to support the findings • To what extent contradictory data are taken into account • Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation
9	<p>Is there a clear statement of findings?</p> <p>Yes</p> <p>Can't tell</p>	<p>HINT: Consider whether:</p> <ul style="list-style-type: none"> • If the findings are explicit • If there is adequate discussion of the evidence both for and against the researcher's arguments

	No	<ul style="list-style-type: none"> • If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst) • If the findings are discussed in relation to the original research question
Section C: Will the results help locally?		
10	<p>How valuable is the research?</p> <p>[free text]</p>	<p>HINT: Consider:</p> <ul style="list-style-type: none"> • If the researcher discusses the contribution the study makes to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant research based literature) • If they identify new areas where research is necessary • If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

File S8. Keywords and country domains for grey literature searches.

Keywords: travel behaviour, active transport, physical activity

Country domains: google.cm (Cameroon), google.com.jm (Jamaica), google.co.ke (Kenya), google.co.za (South Africa)

Cameroon:		google.cm	
Search in Google	Date of access	URL link	Title
travel behaviour active transport physical activity "cameroon"	26/07/2019	1	Children's Active Transportation (Pg 176)
travel behaviour active transport physical activity "cameroon"	26/07/2019	2	Rural Transport Health and Safety in Sub-Saharan Africa
travel behaviour active transport physical activity "cameroon"	26/07/2019	3	A cross-sectional study of physical activity and sedentary behaviours in a Caribbean population: combining objective and questionnaire data to guide future interventions (Pg 12)
travel behaviour active transport physical activity "cameroon"	26/07/2019	4	Potential Health Implications and Health Cost Reductions of Transit-Induced Physical Activity (Pg 4)
travel behaviour active transport physical activity "cameroon"	26/07/2019	5	Research on Women's Issues in Transportation (pg 6)
travel behaviour active transport physical activity "cameroon"	26/07/2019	6	Cameroon
travel behaviour active transport physical activity "cameroon"	26/07/2019	7	Overweight and obesity in children aged 3–13 years in urban Cameroon: a cross-sectional study of prevalence and association with socio-economic status
travel behaviour active transport physical activity "cameroon"	26/07/2019	8	Multinational Cemac-Cameroon-Central African Republic-Chad. Transport Facilitation Programme On The Douala – Bangui And Douala – N'djamena Corridors
travel behaviour active transport physical activity "cameroon"	05/08/2019	A	Motorbike taxis in the "transport crisis" of West and Central African cities
		B	Physical Activity and Associated Socioeconomic Determinants in Rural and Urban Tanzania: Results from the 2012 WHO- STEPS Survey
		C	Chapter 1: Physical inactivity
		D	A grounded theory of how social support influences physical activity in adolescent girls
		E	Environmental determinants of lifestyle behaviours and chronic disease risk
		F	Road infrastructure and border trade in North-East Geopolitical. Zone in Nigeria
		G	Body weight and physical activity of adults in rural Uganda
		H	Children and Youth and Sustainable Urban Mobility
		I	Integrating Big Data into a Sustainable Mobility Policy 2.0 Planning Support System

Jamaica:		google.com.jm	
Search in Google	Date of access	URL link	Title
travel behaviour active transport physical activity "jamaica"	26/07/2019	9	Comparisons of intensity-duration patterns of physical activity in the US, Jamaica and 3 African countries
travel behaviour active transport physical activity " jamaica "	26/07/2019	10	Government of Jamaica – National Transport Policy, October 2007
travel behaviour active transport physical activity " jamaica "	26/07/2019	11	Jamaica Health and Lifestyle Survey 2007-8 TECHNICAL REPORT
travel behaviour active transport physical activity " jamaica "	26/07/2019	12	Association of car ownership and physical activity across the spectrum of human development: Modeling the Epidemiologic Transition Study (METS)
travel behaviour active transport physical activity " jamaica "	26/07/2019	13	A National Transport Strategy Framework For Jamaica: Implications For Financing The Sector
travel behaviour active transport physical activity " jamaica "	26/07/2019	14	Jamaica 2019 Crime & Safety Report (Transportation-Safety situation)
travel behaviour active transport physical activity " jamaica "	05/08/2019	J	A cross-sectional study of physical activity and sedentary behaviours in a Caribbean population: combining objective and questionnaire data to guide future interventions
		K	Bicycling for Transportation

Kenya:		google.co.ke	
Search in Google	Date of access	URL link	Title
travel behaviour active transport physical activity "kenya"	26/07/2019	15	Active school transport and weekday physical activity in 9–11-year-old children from 12 countries
travel behaviour active transport physical activity "kenya "	26/07/2019	16	A systematic review of active transportation research in Africa and the psychometric properties of measurement tools for children and youth
travel behaviour active transport physical activity "kenya "	26/07/2019	17	Kenya's 2016 Report Card on the Physical Activity and Body Weight of Children and Youth
travel behaviour active transport physical activity "kenya "	26/07/2019	18	Assessment of Physical Activity and Active Transport Among School Children in Kenya, Nigeria, and Mozambique
travel behaviour active transport physical activity "kenya "	26/07/2019	19	Emerging Evidence of the Physical Activity Transition in Kenya

travel behaviour active transport physical activity "kenya "	26/07/2019	20	Development and convergent validity of new self-administered questionnaires of active transportation in three African countries: Kenya, Mozambique and Nigeria
travel behaviour active transport physical activity "kenya "	26/07/2019	21	Associations Between Parental Perceptions of the Neighborhood Environment and Childhood Physical Activity: Results from ISCOLE-Kenya
travel behaviour active transport physical activity "kenya "	26/07/2019	22	Rural Transport Health and Safety in Sub-Saharan Africa
travel behaviour active transport physical activity "kenya "	05/08/2019	L	Active transport in Africa and beyond: towards a strategic framework
		M	Physical activity temporal trends among children and adolescents
		N	Active mobility and health: Insights from the PASTA project
		O	Life-Oriented Behavioral Research for Urban Policy
		P	Geographies of Transport and Ageing

South Africa: google.co.za			
Search in Google	Date of access	URL link	Title
travel behaviour active transport physical activity "south africa"	26/07/2019	23	Active transport in Africa and beyond: towards a strategic framework
travel behaviour active transport physical activity " south africa"	26/07/2019	24	A systematic review of active transportation research in Africa and the psychometric properties of measurement tools for children and youth
travel behaviour active transport physical activity " south africa"	26/07/2019	25	Transport Geography in South Africa
travel behaviour active transport physical activity " south africa"	26/07/2019	26	Active school transport and weekday physical activity in 9–11-year-old children from 12 countries
travel behaviour active transport physical activity " south africa"	26/07/2019	27	Making the connections between transport disadvantage and the social exclusion of low income populations in the Tshwane Region of South Africa
travel behaviour active transport physical activity " south africa"	26/07/2019	28	The Impact of Crime and Neighbourhood Enclosures on Travel Behaviour and Transport Patterns in South Africa
travel behaviour active transport physical activity " south africa"	26/07/2019	29	Are the correlates of active school transport context-specific?

travel behaviour active transport physical activity " south africa"	05/8/2019	Q	Sustainable Urban Transport in the Developing World: Beyond Megacities
		R	Children's Independent Mobility: Current Knowledge, Future Directions, and Public Health Implications
		S	Associations between active travel and physical multi-morbidity in six low- and middle-income countries among community-dwelling older adults: A cross-sectional study
		T	Towards Sustainable Urban Transportation in Ghana: Exploring Adults' Intention to Adopt Cycling to Work Using Theory of Planned Behaviour and Structural Equation Modelling

Cameroun:		google.cm	
Search in Google	Date of access	URL link	Title
travel behaviour active transport physical activity "cameroun"	26/07/2019	30	Poverty and Urban motility in Doula
travel behaviour active transport physical activity " cameroun "	26/07/2019	31	Motorized Two-Wheelers In Sub-Saharan African Cities: Public And Private Use
travel behaviour active transport physical activity " cameroun "	26/07/2019	32	Addressing urban sprawl in Douala, Cameroon: Lessons from Xiamen integrated coastal management
travel behaviour active transport physical activity " cameroun "	05/8/2019	U	TRANSPORT SERVICES AND THEIR IMPACT ON POVERTY AND GROWTH IN RURAL SUB-SAHARAN AFRICA
		V	TRANSPORTATION CONDITIONS AND ACCESS TO SERVICES IN A CONTEXT OF URBAN SPRAWL AND DEREGULATION THE CASE OF DAR ES SALAAM
		W	Transport for Sustainable Development
		X	INTRODUCING SUSTAINABLE URBAN TRANSPORT. A case of Kampala, Uganda
		Y	Low carbon stations for low carbon cities

File S9. Characteristics of included studies.

Author (year)	Region	Country (setting)	Theory	Quantitative methods	Qualitative methods	Outcomes	Sample characteristics	Funding	Authorship
Qualitative studies									
Gough (2008)	Eastern Africa	Zambia (Lusaka)	Mobilities paradigm		Focus groups In-depth interviews	Mobility and travel behaviour	Sample size: n=60 individuals Area: urban Sex: males and females Age: adolescents and younger adults	Council for Development Research of the Danish International Development Agency	First author: Denmark Single author study
Benwell (2009)	Southern Africa	South Africa (Cape Peninsula)	Mobilities paradigm		Focus groups Art-based methods (drawing, painting, photography, drama) Mapping Accompanied walks	Mobility and travel behaviour	Sample size: n=65 individuals Area: urban Sex: 40% males, 60% females Age: [38,39,48-50,53,58,70,74-76,95,100,113,114,132,133]	United Kingdom Economic and Social Research Council	First author: United Kingdom Single author study
Kamuhanda (2009)	Eastern Africa	Uganda (Kampala)	None specified		Structured interviews	Paratransit	Sample size: n=161 individuals Area: urban Sex: males and females Age: adults	International Labour Organisation United Kingdom Department for International Development	First author: Uganda Last author: India
Langevang (2009)	Western Africa	Ghana (Madina)	Mobilities paradigm		Focus groups Life histories Photo-elicitation Accompanied walks	Mobility and travel behaviour	Sample size: n=17 focus groups Area: urban Sex: males and females Age: adolescents and younger adults	Council for Development Research of the Danish International Development Agency	First author: Denmark Last author: Denmark
Porter (2010)	Eastern Africa Western Africa	Ghana (Abura) Malawi (Ndirande) South Africa (Ngangalizwe)	Mobilities paradigm		In-depth interviews Focus groups Life histories Accompanied walks	Mobility and travel behaviour	Sample size: not reported Area: urban Sex: males and females Age: children and adolescents	United Kingdom Department for International Development	First author: United Kingdom

	Southern Africa							United Kingdom Economic and Social Research Council	Last author: Ghana
Porter (2010)	Southern Africa	South Africa (OR Tambo District Municipality)	None specified		In-depth interviews Focus groups Life histories Accompanied walks	Travel behaviour	Sample size: not reported Area: rural Sex: males and females Age: children and adolescents	No funding reported	First author: United Kingdom Last author: South Africa
Lucas (2011)	Southern Africa	South Africa (Tshwane Metropolitan Region)	Social exclusion		Focus groups	Travel behaviour	Sample size: n=102 individuals Area: urban Sex: males and females Age: adolescents and adults	South Africa Department of Transport	First author: United Kingdom Single author study
Porter (2011)	Eastern Africa Western Africa	Ghana Malawi Nigeria	Gendered discourse		In-depth interviews	Travel behaviour	Sample size: not reported Area: rural Sex: 100% female Age: children and adults	United Kingdom Department for International Development United Kingdom Economic and Social Research Council	First author: United Kingdom Single author study
Archambault (2012)	Eastern Africa	Mozambique (Inhambane)	None specified		Group discussions Individual conversations	Travel behaviour	Sample size: not reported Area: urban Sex: 100% male Age: younger adults	Social Sciences and Humanities Research Council of Canada United Kingdom Overseas Research Student Scheme Central Research Fund, University of London, United Kingdom	First author: United Kingdom Single author study

Turner (2012)	Eastern Africa	Mozambique (Nampula) Rwanda (Kigali)	None specified		Group (household) discussions	Travel behaviour	Sample size: not reported Area: urban Sex: not reported Age: not reported	No funding reported	First author: United Kingdom Last author: United Kingdom
van Blerk (2013)	Southern Africa	South Africa (Cape Town, Cape Flats)	Mobilities paradigm		Unstructured interviews Focus groups Participatory mapping	Mobility and travel behaviour	Sample size: n=50 individuals Area: urban Sex: mostly male Age: children, adolescents and younger adults	United Kingdom Economic and Social Research Council	First author: United Kingdom Single author study
Raynor (2014)	Eastern Africa	Uganda (Kampala)	None specified		Focus groups In-depth interviews	Paratransit	Sample size: not reported Area: urban Sex: not reported Age: not reported	No funding reported	First author: Uganda Single author study
Alando (2016)	Eastern Africa	Kenya (Kisumu)	None specified		Semi-structured interviews Field notes Policy analysis	Cycling	Sample size: 2 individuals Area: urban Sex: not reported Age: adults	German Academic Exchange Program Kenya National Council for Science, Technology and Innovation	First author: Germany Last author: Germany
El-Dorghamy (2016)	Northern Africa	Egypt (Ezbet El-Haggana)	Theory of planned behaviour		Focus groups Semi-structured interviews Field notes Photo-elicitation	Travel behaviour	Sample size: n=10 focus groups each comprising 4-11 individuals Area: urban Sex: males and females Age: children and adults	No funding reported	First author: Germany Last author: United Arab Emirates
Esson (2016)	Western Africa	Ghana (Accra)	Mobilities paradigm		Focus groups Semi-structured interviews	Mobility and travel behaviour	Sample size: n=118 individuals, n=14 focus groups Area: urban	RurbanAfrica funded by the European Union	First author: United Kingdom

							Sex: males and females Age: adolescents and adults		Last author: Ghana
Ortegon-Sanchez (2016)	Caribbean	Panama (Panama City Metropolitan Area)	None specified		Stakeholders' interviews	Bus Rapid Transit use	Sample size: n=9 Organizations involved in the mobility from different sectors and government levels	The British Embassy-Prosperity fund programme	First author: United Kingdom Last author: United Kingdom
Zolnikov (2016)	Eastern Africa	Kenya (Narok)	None specified		Accompanied walks	Walking to collect water	Sample size: not reported Area: rural Sex: 100% female Age: adults	No funding reported	First author: United States of America Single author study
Kenea (2017)	Eastern Africa	Ethiopia (Addis Ababa)	None specified		In-depth interviews	Use of travel modes	Sample size: n=12 stakeholders from transport sector Area: urban Sex: 83% males, 17% females	No funding reported	First author: Australia Last author: Australia
Yankson (2017)	Western Africa	Ghana (Sekondi-Takoradi)	Kaufmann's typology of mobility		Focus groups Semi-structured interviews	Travel behaviour	Sample size: n=108 individuals, n=20 focus groups Area: urban Sex: males and females Age: adolescents and adults	RurbanAfrica funded by the European Union	First author: Ghana Last author: Ghana
Gwaka (2018)	Eastern Africa	Zimbabwe (Beitbridge district)	Mobilities paradigm		Focus groups Individual conversations	Mobility and travel behaviour	Sample size: 3 focus groups Area: rural Sex: males and females Age: adolescents and younger adults	Makerere University School of Public Health's Resilient Africa Network University of Pretoria Southern Africa Resilience Innovation Lab	First author: South Africa Single author study

								United States Agency for International Development	
Lesteven (2018)	Eastern Africa Southern Africa	Ethiopia (Addis Ababa) Kenya (Nairobi) South Africa (Cape Town)	None specified		Semi-structured interviews Field notes	Paratransit and public transport	Sample size: n=32 individuals Area: urban Sex: not reported Age: not reported	Sustainable Mobility Institute Renault-ParisTech, as part of the NexMob research project undertaken by City Mobility Transport Lab	First author: France Last author: France
Poku-Boansi (2018)	Western Africa	Ghana (Kumasi)	None specified		Semi-structured interviews	Travel behaviour	Sample size: n=200 individuals Area: urban Sex: 48% males, 52% females Age: adults	No funding reported	First author: Ghana Last author: Ghana
Mixed-method studies									
Behrens (2010)	Southern Africa	South Africa (Cape Town)	Behavioural change transactional model	Cross-sectional survey	Semi-structured interviews	Travel behaviour	Sample size: n=40 individuals Area: urban Sex: not reported Age: not reported	No funding reported	First author: South Africa Last author: South Africa
Diaz Olvera (2010)	Central Africa Western Africa	Cameroon (Douala) Niger (Niamey)	None specified	Cross-sectional survey	In-depth interviews	Use of travel modes	Sample size: not reported Area: urban Sex: not reported Age: not reported	No funding reported	First author: France Last author: Cameroon
Integrated Transport Planning (2010)	Eastern Africa	Uganda (Greater Kampala Metropolitan Area)	None specified	Cross-sectional survey Traffic counts	Semi-structured interviews	Travel time Travel distance Travel speed Use of travel modes	Sample size: n=126,895 inbound traffic counts; 127,197 outbound traffic counts Area: urban Sex: not reported Age: not reported	No funding reported	First author: United Kingdom Single author study

Nkurunziza (2010)	Eastern Africa	Tanzania (Dar es Salaam)	Behavioural change transactional model	Cross-sectional survey	Interview	Travel distance Use of travel modes Travel purpose	Sample size: n=598 individuals Area: urban Sex: 75% males, 25% females Age: children and adults	The Netherlands Cycling Academic Network and Interface for Cycling Expertise	First author: The Netherlands Last author: The Netherlands
Abane (2011)	Western Africa	Ghana (Accra, Kumasi, Tamale and Sekondi-Takoradi)	None specified	Cross-sectional survey	In-depth interviews Field notes	Paratransit and public transport	Sample size: n=926 individuals, n=21 transport officials Area: urban Sex: 51% males, 48% females Age: adolescents and adults	No funding reported	First author: Ghana Single author study
Amoako-Sakyi (2011)	Western Africa	Ghana (urban, peri-urban and rural communities)	None specified	Cross-sectional survey	Focus groups In-depth interviews	Cycling	Sample size: n=1005 individuals, n=323 interviews, n=31 focus groups Area: urban and rural Sex: 47% males, 53% females Age: children and adolescents	No funding reported	First author: Ghana Last author: Ghana
Kumar (2011)	Central Africa Eastern Africa Western Africa	Cameroon (Douala) Nigeria (Lagos) Uganda (Kampala)	Political economy perspective	Cross-sectional survey	Focus groups Semi-structured interviews Field notes	Travel distance Trips Use of travel modes	Sample size: not reported Area: urban Sex: males and females Age: not reported	European Commission Islamic Development Bank African Development Bank World Bank	First author: not reported Single author study
Porter (2011)	Eastern Africa	Malawi	None specified	Cross-sectional survey	In-depth interviews Focus groups Life histories Accompanied walks	Travel distance Use of travel modes	Sample size: n=1,003 individuals Area: urban and rural Sex: males and females	United Kingdom Department for International Development	First author: United Kingdom

						Travel purpose	Age: children and adolescents	United Kingdom Economic and Social Research Council	Last author: Malawi
Bogale (2012)	Eastern Africa	Ethiopia (Bahir Dar and Hawassa)	None specified	Cross-sectional survey	In-depth interviews Field notes	Cycling	Sample size: n=408 individuals, n=32 key informants Area: urban Sex: 76% males, 24% females Age: adolescents and adults	No funding reported	First author: Ethiopia Single author study
Kola (2012)	Eastern Africa	Kenya (Kisumu)	None specified	Cross-sectional survey Land use maps	Focus groups Semi-structured interviews Field notes	Use of travel modes Travel purpose	Sample size: n=400 households Area: urban Sex: not reported Age: not reported	No funding reported	First author: Kenya Last author: Kenya
Porter (2012)	Eastern Africa Western Africa Southern Africa	Ghana Malawi South Africa	None specified	Cross-sectional survey	In-depth interviews Focus groups Life histories Accompanied walks	Travel time Use of travel modes Travel purpose	Sample size: n~3,000 individuals Area: urban and rural Sex: males and females Age: children and adolescents	United Kingdom Department for International Development United Kingdom Economic and Social Research Council	First author: United Kingdom Single author study
Diaz Olvera (2013)	Central Africa Western Africa	Burkina Faso (Ouagadougou) Cameroon (Douala) Guinea (Conakry) Mali (Bamako) Niger (Niamey) Senegal (Dakar)	None specified	Cross-sectional survey	Semi-structured interviews	Travel time Travel distance Trips Use of travel modes Travel purpose	Sample size: n=18,374 individuals, n=60 interviews Area: urban Sex: males and females Age: adolescents and adults	No funding reported	First author: France Last author: France
Porter (2013)	Eastern Africa	Tanzania (Kibaha district)	None specified	Cross-sectional survey	Semi-structured interviews	Travel time Use of travel modes	Sample size: n=339 individuals Area: rural	Africa Community Access Programme	First author: United Kingdom

						Travel purpose	Sex: 39% males, 61% females Age: older adults		Last author: Tanzania
Gamberini (2014)	Eastern Africa	Uganda (Kabale district)	Social and economic exclusion	Cross-sectional survey	Semi-structured interviews	Number of trips Use of travel modes Choice of travel modes Travel purpose	Sample size: n=268 household heads Area: rural Sex: not reported Age: adults	No funding reported	First author: United States Single author study
Ojo (2014)	Western Africa	Ghana (Accra-Takoradi)	None specified	Cross-sectional survey	In-depth interviews Field notes	Public transport	Sample size: n=497 individuals, n=42 interviews Area: urban Sex: 57% males, 43% females Age: adults	No funding reported	First author: Ghana Last author: Ghana
Sam (2014)	Western Africa	Ghana (Cape Coast)	None specified	Cross-sectional survey	In-depth interviews	Preference and patronage of public transport mode	Sample size: n=100 students Area: not applicable Sex: 50% males, 50% females Age: 71% aged 21- 25 years, 22% aged 16- 20 years.	No funding reported	First author: Ghana Last author: Ghana
Agyemang (2015)	Western Africa	Ghana (Greater Accra Metropolitan Area)	None specified	Cross-sectional survey	In-depth interviews	Paratransit and public transport	Sample size: n=30 individuals, n=6 drivers, n=4 key informants, n=120 trips Area: urban Sex: individuals 40% males, 60% females Age: adolescents and adults	No funding reported	First author: Ghana Single author study
Vermeiren (2015)	Eastern Africa	Uganda (Kampala)	Hägerstrand's space-time framework	Cross-sectional survey	Semi-structured interviews Field notes Participatory mapping	Travel time Travel distance Use of travel modes	Sample size: n=143 individuals Area: urban Sex: not reported Age: adults	Belgium Fund for Scientific Research Flanders	First author: Belgium Last author: Belgium

Mbara (2016)	Southern Africa	South Africa (Johannesburg)	None specified	Cross-sectional survey	Unstructured interviews	Tuk tuk	Sample size: n=150 individuals Area: urban Sex: 36% males, 64% females Age: adults	No funding reported	First author: South Africa Single author study
Seedhouse (2016)	Western Africa	Nigeria (Kwara, Nasarawa, Plateau, Borno, Taraba, Yobe, Kaduna, Zamfara, Abia, Ebonyi, Enugu, Cross River, Edo, Ogun, Ondo and Oyo states)	None specified	Cross-sectional survey	In-depth interviews	Use of travel modes	Sample size: n=92 individuals Area: rural Sex: female only Age: adults	No funding reported	First author: United Kingdom Last author: United Kingdom
Andreasen (2017)	Eastern Africa	Tanzania (Dar es Salaam)	None specified	GIS analysis	Focus groups Semi-structured interviews Key informant interviews Field notes	Travel time Use of travel modes Travel purpose	Sample size: n=174 individuals Area: urban Sex: males and females Age: adults	RurbanAfrica funded by the European Union	First author: Denmark Last author: Denmark
Mokitimi (2017)	Southern Africa	South Africa (Limpopo Province)	None specified	Cross-sectional survey Spatial analysis Road accident analysis Photo-elicitation	Semi-structured interviews Field observations Policy analysis	Non-motorised travel	Sample size: n=138 individuals Area: rural Sex: 55% female, 45% males Age: 41% aged 26-40 years, 32% aged 18-25 years	No funding reported	First author: South Africa Last author: South Africa
Porter (2017)	Southern Africa	South Africa (Eastern Cape and Gauteng Province)	None specified	Cross-sectional survey	In-depth interviews Focus groups Life histories Accompanied walks	Use of travel modes	Sample size: n=642 individuals, n~200 interviews Area: urban Sex: males and females	United Kingdom Department for International Development	First author: United Kingdom Last author: South Africa

							Age: children, adolescents and younger adults	United Kingdom Economic and Social Research Council	
Delatte (2018)	Northern Africa	Algeria (Algiers) Morocco (Casablanca)	Maslow's hierarchical pyramid of human needs	Cross-sectional survey	Focus groups	Public transport	Sample size: n=433 individuals Area: urban Sex: males and females (focus groups female only) Age: adolescents and adults	No funding reported	First author: United Arab Emirates Last author: United Arab Emirates
Evans (2018)	Eastern Africa	Uganda (Kampala)	None specified	Cross-sectional survey GIS analysis	Semi-structured interviews Photo elicitation	Paratransit	Sample size: n=60 individuals, n=400 GPS tracks Area: urban Sex: males and females Age: not reported	National Geographic	First author: United Kingdom Last author: Germany
Irlam (2018)	Southern Africa	South Africa (Masiphumelele)	Kaufmann's 'motility' concept	Cross-sectional survey	Focus groups	Cycling	Sample size: n=100 individuals, n=1 focus group Area: urban Sex: males and females Age: adults	No funding reported	First author: South Africa Single author study
Oviedo (2017)	Western Africa	Nigeria (Abuja, Kaduna and Ibadan)	Person-centred framework linking transport and wellbeing	Cross-sectional survey	Semi-structured interviews In-depth interviews	Use of travel modes Travel purpose	Sample size: n=337 individuals, n=25 interviews Area: urban Sex: 59% males, 41% females Age: adults	United Kingdom Department for International Development ICF International STO Associates, Nigeria	First author: United Kingdom Last author: United Kingdom
Janusz (2019)	Eastern Africa	Uganda (Kampala)	Hägerstrand's model of timespace constraints	GIS analysis	Semi-structured interviews Key informant interviews Field notes	Travel time Travel distance Trips Use of travel modes Travel purpose	Sample size: n=10 individuals Area: urban Sex: 30% males, 70% females Age: adults	No funding reported	First author: Belgium Last author: Belgium

Quantitative studies									
Aworemi (2008)	Western Africa	Nigeria (Ilorin)		Cross-sectional survey		Use of travel modes Travel purpose	Sample size: n=256 individuals Area: urban Sex: 66% males, 34% females Age: adolescents and adults	No funding reported	First author: Nigeria Last author: Nigeria
Bryceson (2008)	Eastern Africa	Ethiopia (Hidabo Abote Wereda and Degem Wereda) Zambia (Chipata District, Eastern Province and Luanshya District, Copperbelt Province)		Cross-sectional survey		Travel time Travel distance Trips Use of travel modes	Sample size: not reported Area: rural Sex: not reported Age: not reported	United Kingdom Department for International Development United Kingdom Transport Research Laboratory	First author: United Kingdom Last author: United Kingdom
Odufuwa (2008)	Western Africa	Nigeria (Lagos)		Cross-sectional survey		Trips Use of travel modes	Sample size: n=356 individuals Area: urban Sex: males and females Age: adults	No funding reported	First author: Nigeria Single author study
Behrens (2009)	Southern Africa Eastern Africa	South Africa (Cape Town) Tanzania (Dar Es Salaam)		Cross-sectional survey		Number of trips and trip stages	Sample size: n= 492 individuals (230 from Cape Town, 262 from Dar es Salaam) Area: urban Sex: 49% male; 51% female Age: 9% 12-16 years; 37% 17-25 years; 39% 26-40 years; 12% 41-60 years; 12% over 60 years	Volvo Research and Educational Foundations	First author: South Africa Last author: Tanzania
Bechstein (2010)	Southern Africa	South Africa (Mamelodi and Nellmapius)		Cross-sectional survey		Trips Use of travel modes Travel purpose	Sample size: n=178 individuals Area: urban Sex: predominantly male Age: adults	No funding reported	First author: South Africa Single author study

Behrens (2010)	Southern Africa	South Africa (Cape Town)		Cross-sectional survey		Use of travel modes	Sample size: n=993 individuals Area: urban Sex: 49% males, 51% females Age: adults	African Centre of Excellence for Studies in Public and Non-motorised Transport funded by Volvo Research and Educational Foundations Cape Town Metrorail	First author: South Africa Last author: South Africa
Elfiky (2010)	Northern Africa	Egypt (Kafr Elshiekh)		Cross-sectional survey		Use of travel modes	Sample size: not reported Area: urban Sex: males and females Age: children and adults	No funding reported	First author: Egypt Single author study
Ipingbemi (2010)	Western Africa	Nigeria (Ibadan)		Cross-sectional survey		Use of travel modes	Sample size: n=264 individuals Area: urban Sex: 41% males, 59% females Age: older adults	No funding reported	First author: Nigeria Single author study
Salon (2010)	Eastern Africa	Kenya (Nairobi)		Cross-sectional survey		Use of travel modes Travel purpose	Sample size: n=4,375 individuals Area: urban Sex: males and females Age: children and adults	World Bank Norwegian Trust Fund	First author: United States of America Last author: United States of America
Alemu (2011)	Western Africa	Sierra Leone		Cross-sectional survey		Active travel time	Sample size: n=4,997 individuals Area: not reported Sex: 46% males, 54% females Age: adults	No funding reported	First author: Sierra Leone Last author: Sierra Leone
Bwire (2011)	Eastern Africa	Tanzania (Dar Es Salaam)		Cross-sectional survey		Travel time Use of travel modes	Sample size: n=284 individuals Area: urban	African Centre of Excellence for Studies in Public	First author: Tanzania

						Travel purpose	Sex: males and females Age: children and parents	and Non-motorised Transport funded by Volvo Research and Educational Foundations	Single author study
Babinard (2011)	Northern Africa	Morocco		Cross-sectional survey		Use of travel modes Travel purpose	Sample size: n=822 individuals Area: urban and rural Sex: 27% males, 73% females Age: adults	World Bank	First author: United States of America Single author study
Guthold (2011)	Northern Africa Central Africa Eastern Africa Western Africa Southern Africa	Algeria Benin Botswana Cameroon Cape Verde Chad Cote d'Ivoire Congo Eritrea Ethiopia Gabon Madagascar Malawi Mali Mauritania Mozambique Niger Sao Tome et Principe Sierra Leone Swaziland Zambia		Cross-sectional survey		Active travel time	Sample size: n=57,038 individuals Area: urban and rural Sex: 42% males, 58% females Age: adults	No funding reported	First author: Switzerland Last author: Switzerland
Masaoe (2011)	Eastern Africa Southern Africa	Kenya (Nairobi) South Africa (Cape Town) Tanzania (Dar es Salaam)		Cross-sectional survey		Trips Use of travel modes Travel purpose	Sample size: n=6,013 households Area: urban Sex: males and females Age: children and adults	African Centre of Excellence for Studies in Public and Non-motorised Transport funded	First author: Tanzania Last author: Kenya

								by Volvo Research and Educational Foundations	
Muhammed (2011)	Western Africa	Nigeria (Kano state)		Cross-sectional survey		Paratransit	Sample size: n=365 individuals Area: urban Sex: males and females Age: adults	No funding reported	First author: Nigeria Single author study
Mutiso (2011)	Eastern Africa	Kenya (Kisumu and Nakuru)		Cross-sectional survey		Use of boda-boda Daily service trips Trip distance	Sample size: n= 500 individuals Area: not reported Sex: Almost all were male Age: 33% 18-22 years old, 34% 23-27 years old, 24% 28-32 years old, and 6% 33-37 years old	The Mombasa Polytechnic and the Volvo Research and Educational Foundations	First author: South Africa Last author: South Africa
Oyeyemi (2011)	Western Africa	Nigeria (Ibadan)		Cross-sectional survey		Walking	Sample size: n=1,006 individuals Area: urban Sex: 49% males, 51% females Age: adolescents and adults	No funding reported	First author: Nigeria Last author: United States of America
Venter (2011)	Southern Africa	South Africa (Gauteng)		Repeat cross-sectional survey		Travel time Travel distance Trips Use of travel modes Travel purpose	Sample size: n=16,729 individuals Area: urban Sex: males and females Age: adolescents and adults	Gauteng City-Region Observatory funded by University of Johannesburg, University of the Witwatersrand, and the Gauteng Provincial Government	First author: South Africa Last author: South Africa
Venter (2011)	Southern Africa	South Africa		Cross-sectional survey		Travel time Use of travel modes Travel purpose	Sample size: n=163,064 individuals Area: urban and rural Sex: males and females Age: adults	South Africa Department of Transport	First author: South Africa Single author study

Walter (2011)	Southern Africa	South Africa (Nelson Mandela Metropolitan Area)		Cross-sectional survey		Active travel time	Sample size: n=180 individuals Area: urban Sex: 100% females Age: adults	South Africa National Research Foundation Nelson Mandela Metropolitan University	First author: South Africa Last author: South Africa
Abiola (2012)	Western Africa	Nigeria (Abeokuta)		Cross-sectional survey		Trips Use of travel modes	Sample size: n=1,300 individuals Area: urban Sex: not reported Age: adults	No funding reported	First author: Nigeria Last author: Nigeria
Adetunji (2012)	Western Africa	Nigeria (Ilesa)		Cross-sectional survey Regional and national government datasets		Travel time Travel distance Trips Use of travel modes Travel purpose	Sample size: n=1,200 individuals Area: urban Sex: 52% males, 48% females Age: adults	No funding reported	First author: Nigeria Single author study
Ibitayo (2012)	Western Africa	Nigeria (Lagos)		Cross-sectional survey		Transport mode Time of the day to commute	Sample size: n=200 individuals Area: urban Sex: 56.6% males Age: 36% were 30-39 years old, 25.5% 40-49 years old, 19.3% 20-29 years, 10.9% 50-59 years old, 5.6% 60-69 years old, 2.7% 60-69 years old	No funding reported	First author: United States Single author study
Nkurunziza (2012) (1)	Eastern Africa	Tanzania (Dar Es Salaam)		Cross-sectional survey		Use of travel modes Choice of travel modes	Sample size: n=598 individuals Area: urban Sex: not reported Age: not reported	Dutch Ministry of Development Cooperation co-funded by the University of Twente (The Netherlands)	First author: The Netherlands Last author: The Netherlands
Nkurunziza (2012) (2)	Eastern Africa	Tanzania (Dar Es Salaam)		Cross-sectional survey		Use of travel modes	Sample size: n=598 individuals Area: urban	No funding reported	First author: The Netherlands

						Choice of travel modes	Sex: 25% female, 75% male Age: 10y to >45y		Last author: The Netherlands
Nwaogbe (2012)	Western Africa	Nigeria (Aba)		Cross-sectional survey		Perception on safety, cost, comfort, availability of the service Transport mode use	Sample size: n= 229 individuals Area: urban Sex: 64% male and 36% female Age: 10% below the age of 15 years; 33% in the range 15–24 years; 19% between 25 years and 34 years; 12% from 35–44 years; 10% aged 45–54 years; while 16% were 55 years and above.	No funding reported	First author: The Nigeria Last author: The Nigeria
Odufuwa (2012)	Western Africa	Nigeria (Ibadan)		Cross-sectional survey		Travel time Travel distance Trips Use of travel modes Travel purpose	Sample size: n=203 individuals Area: urban Sex: males and females Age: adults	No funding reported	First author: Nigeria Last author: Nigeria
Olawole (2012)	Western Africa	Nigeria (Lagos)		Cross-sectional survey		BRT use and frequency Distance to access BRT terminus Mode to access BRT terminus	Sample size: n=200 individuals Area: urban Sex: 59% were males. Age: 28% below 20 years, 63% between 21 and 40 years, 7% between 41 and 60 years. Those above 60 years old accounted for the remaining 2%.	No funding reported	First author: Nigeria Single author study
Salon (2012)	Eastern Africa	Kenya (Nairobi)		Cross-sectional survey		Travel distance Use of travel modes	Sample size: n=7,500 individuals Area: urban Sex: males and females Age: children and adults	Volvo Research and Educational Foundation	First author: United States of America

								The Earth Institute at Columbia University, United States of America	Last author: Kenya
Alade (2013)	Western Africa	Nigeria (Lagos)		Cross-sectional survey		Travel time Trips Use of travel modes Travel purpose	Sample size: n=155 individuals Area: urban Sex: 51% males, 49% females Age: older adults	No funding reported	First author: Nigeria Last author: Nigeria
Amoh-Gyimah (2013)	Western Africa	Ghana (Kumasi)		Cross-sectional survey		Travel time Travel distance Use of travel modes Travel purpose	Sample size: n=372 individuals Area: urban Sex: 68% males, 32% females Age: adults	No funding reported	First author: Ghana Last author: Nigeria
Matous (2013)	Eastern Africa	Ethiopia (Tiyo District)		Cross-sectional survey		Travel time Travel frequency Travel purpose	Sample size: n=297 individuals Area: rural Sex: 87% male Age: 45.5 (SD 16.0) years	Japanese Ministry of Education, Culture, Sports, Science and Technology	First author: The Japan Last author: The Japan
Nkurunziza (2013)	Eastern Africa	Tanzania (Dar Es Salaam)		Cross-sectional survey		Cycling	Sample size: n=448 individuals Area: urban Sex: 87% males, 13% females Age: adolescents and adults	The Netherlands Cycling Academic Network and Interface for Cycling Expertise	First author: The Netherlands Last author: The Netherlands
Dugas (2014)	Eastern Africa Western Africa Southern Africa	Ghana (Nkwantakese) Seychelles South Africa (Khayelitsha)		Cross-sectional survey		Active travel time	Sample size: n=1,504 individuals Area: urban and rural Sex: males and females Age: adults	No funding reported	First author: United States of America Last author: United States of America

Gradidge (2014)	Southern Africa	South Africa (Soweto)		Cross-sectional survey		Active travel time	Sample size: n=977 individuals Area: urban Sex: 100% female Age: adults	Medical Research Council of South Africa University of the Witwatersrand United Kingdom Wellcome Trust United Kingdom Department for International Development United Kingdom Medical Research Council The Carnegie Corporation of New York	First author: South Africa Last author: South Africa
Joshi (2014)	Eastern Africa	Kenya (Kibera)		Cross-sectional survey		Active travel time	Sample size: n=2,061 individuals Area: urban Sex: 51% males, 49% females Age: adults	No funding reported	First author: Kenya Last author: Kenya
Luke (2014)	Eastern Africa Western Africa Southern Africa	Ghana Seychelles South Africa		Cross-sectional survey		Active travel time	Sample size: n=1,504 individuals Area: urban and rural Sex: males and females Age: older adults	United States National Institutes of Health	First author: United States of America Last author: United States of America
Mfinanga (2014)	Eastern Africa	Tanzania (Dar es Salaam)		Cross-sectional survey		Walking	Sample size: n=386 individuals Area: urban Sex: 42% males, 58% females	No funding reported	First author: Tanzania Single author study

							Age: children and adults		
Olawole (2014)	Western Africa	Nigeria (Osogbo)		Cross-sectional survey		Travel distance Trips Use of travel modes Travel purpose	Sample size: n=250 individuals Area: urban Sex: 51% males, 49% females Age: older adults	No funding reported	First author: Nigeria Last author: Nigeria
Oyeyemi (2014)	Western Africa	Nigeria (Maiduguri)				Transport-related physical activity. Time and intensity BMI, blood pressure	Sample size: n=180 individuals Area: not reported Sex: 50% female, 50% male Age: 35.6±10.3 years	No funding reported	First author: Nigeria Last author: Nigeria
Baldew (2015)	Caribbean	Suriname		Cross-sectional survey		Transport-related physical activity Active travel modes (walking/cycling)	Sample size: n=180 individuals Area: 76 % urban, 24% rural Sex: 48.6% male, 51.4% female Age: average age was 36.2 years (range 15 to 64).	Surinamese Government. NV Consolidated Industries Corporation (CIC) Staatsolie Maatschappij Suriname N.V.	First author: Suriname Last author: Belgium
Kolbe-Alexander (2015)	Southern Africa	South Africa (Cape Town)		Cross-sectional survey		Active travel time	Sample size: n=44 individuals Area: urban Sex: 23% males, 77% females Age: older adults	University of Cape Town	First author: South Africa Last author: South Africa
Laverty (2015)	Western Africa Southern Africa	Ghana South Africa		Cross-sectional survey		Active travel time	Sample size: n=9,800 individuals Area: urban and rural Sex: males and females Age: adults	No funding reported	First author: United Kingdom Last author: United Kingdom
Olawole (2015)	Western Africa	Nigeria (Ilesa)		Cross-sectional survey		Travel time Travel distance	Sample size: n=378 individuals Area: urban	No funding reported	First author: Nigeria

						Trips Use of travel modes Travel purpose	Sex: 62% males, 38% females Age: older adults		Single author study
Salau (2015)	Western Africa	Nigeria (Lagos)		Cross-sectional survey		Travel time Travel distance Use of travel modes	Sample size: n=1,475 individuals Area: urban Sex: 60% males, 40% females Age: adolescents and adults	No funding reported	First author: Nigeria Single author study
Weinstock (2015)	Eastern Africa	Kenya (Nairobi)		Cross-sectional survey		Transport mode Passenger behaviour Trip patterns	Sample size: n=48 routes Area: not reported Sex: not reported Age: not reported	Institute for Transportation & Development Policy (ITDP) ClimateWorks	First author: not reported Last author: not reported
Acheampong (2016)	Western Africa	Ghana (Kumasi)		Cross-sectional survey		Cycling	Sample size: n=550 individuals Area: urban Sex: 49% males, 51% females Age: adults	No funding reported	First author: United Kingdom Single author study
Bartels (2016)	Southern Africa	South Africa (Cape Town)		Cross-sectional survey		Active travel time Travel purpose	Sample size: n=1,321 individuals Area: urban Sex: males and females Age: adults	National Research Foundation of South Africa	First author: South Africa Last author: South Africa
Diaz Olvera (2016)	Western Africa	Senegal (Dakar)		Repeat cross-sectional survey		Travel time Trips Use of travel modes Travel purpose	Sample size: n=22,073 individuals Area: urban Sex: males and females Age: adolescents and adults	Executive Council of Urban Transport in Dakar	First author: France Last author: France
Guwatudde (2016)	Eastern Africa	Uganda		Cross-sectional survey		Active travel time	Sample size: n=3,987 individuals Area: urban and rural	Uganda government	First author: Uganda

							Sex: 40% males, 60% females Age: adults	World Health Organization World Diabetes Foundation United Nations Development Program	Last author: Uganda
Nigatu Haregu (2016)	Eastern Africa	Kenya (Nairobi)		Cross-sectional survey		Active travel time	Sample size: n=5,190 individuals Area: urban Sex: 54% males, 46% females Age: adults	United Kingdom Wellcome Trust	First author: Kenya Last author: Kenya
Olawole (2016)	Western Africa	Nigeria (Ile-Ife)		Cross-sectional survey		Travel time Travel distance Use of travel modes	Sample size: n=1,638 individuals Area: urban Sex: 63% males, 37% females Age: younger adults	No funding reported	First author: Nigeria Last author: Nigeria
Oyeyemi (2016)	Western Africa	Nigeria (Maiduguri)		Cross-sectional survey		Active travel time	Sample size: n=1,006 individuals Area: urban Sex: 50% males, 50% females Age: adolescents	No funding reported	First author: Nigeria Last author: Nigeria
Saddier (2016)	Western Africa	Ghana (Greater Accra Metropolitan Area)		GIS analysis		Paratransit	Sample size: n=580 paratransit routes Area: urban Sex: not applicable Age: not applicable	Canada Fonds Québécois de la Recherche sur la Société et la Culture Nouveaux Chercheurs Program Canada Research Chairs Program	First author: Ghana Last author: Canada

								Canadian Foundation for Innovation	
Agyemang (2017)	Western Africa	Ghana (Greater Accra Metropolitan Area)		Cross-sectional survey		Travel distance Use of travel modes Travel purpose	Sample size: n=613 individuals Area: urban Sex: males and females Age: adults	Danish International Development Agency	First author: Ghana Single author study
Christoph (2017)	Eastern Africa	Uganda		Cross-sectional survey		Time in active travel Use of travel modes Purpose of travel mode use	Sample size: n=148 individuals Area: 51% rural, 49% urban Sex: 51% female, 49% male Age: 11-16 years, mean age 12.1y (+ 1.1y)	USDA National Institute of Food and Agriculture	First author: United States Last author: United States
Groot (2017)	Eastern Africa	Kenya (Nairobi)		Cross-sectional survey		Active travel time	Sample size: n=10,128 individuals Area: urban and rural Sex: males and females Age: adults	No funding reported	First author: The Netherlands Last author: Kenya
John (2017)	Eastern Africa	Tanzania (Magu district)		Cross-sectional survey		Active travel time	Sample size: n=5,663 individuals Area: urban and rural Sex: 59% males, 41% females Age: adolescents and adults	No funding reported	First author: Tanzania Last author: Tanzania
Machado-León (2017)	Northern Africa	Algeria (Algiers)		Cross-sectional survey		Use of travel modes Travel purpose	Sample size: n=1,454 individuals Area: urban Sex: 54% males, 46% females Age: adolescents and adults	Spanish Initiatives of Development Cooperation Centre, University of Granada	First author: Spain Last author: Spain
Malambo (2017)	Southern Africa	South Africa (Langa, Cape Town, Mount Frere)		Cross-sectional survey		Time in active travel	Sample size: n=671 households Area: urban and rural	Social Innovation in Public Health Impulse	First author: South Africa

							Sex: 23.8% male, 76.2% female Age: 30% aged 35-44 years, 34.5% aged 45-54 years, 35.5% aged 55+ years	fellowship program	Last author: South Africa
McKay (2017)	Southern Africa	South Africa (Gauteng)		Cross-sectional survey		Trip Generation Trip distribution Modal split Traffic assignment	Sample size: not reported Area: not reported Sex: not reported Age: not reported	Gauteng City Regional Observatory (GCRO)	First author: South Africa Last author: South Africa
Micklesfield (2017)	Southern Africa	South Africa (Agincourt and Soweto)		Cross-sectional survey		Active travel time	Sample size: n=1,019 individuals Area: urban and rural Sex: 100% female Age: adolescents and adults	Medical Research Council of South Africa University of the Witwatersrand South Africa Claude Leon Foundation United Kingdom Wellcome Trust United Kingdom Department for International Development United Kingdom Medical Research Council	First author: South Africa Last author: South Africa
Olawole (2017)	Western Africa	Nigeria (Ile-Ife)		Cross-sectional survey		Travel distance Trips Use of travel modes	Sample size: n=273 individuals Area: rural Sex: 49% males, 51% females Age: older adults	No funding reported	First author: Nigeria Single author study

						Travel purpose			
Olojede (2017)	Western Africa	Nigeria (Ilesa)		Cross-sectional survey		Walking	Sample size: n=524 individuals Area: urban Sex: 53% males, 47% females Age: adults	No funding reported	First author: Nigeria Last author: Nigeria
Oyeyemi (2017)	Central Africa Eastern Africa Western Africa Southern Africa Eastern Africa	Cameroon Ghana Mozambique Nigeria South Africa Uganda		Cross-sectional survey		Time in active travel (walking)	Sample size: n=469 individuals Area: Urban, peri-urban and rural Sex: 49.7% female, 50.3% male Age: 32.0 (SD 12.5) years	NIH Grant R01 HL111378 IDRC Grant 107144-001 The Canadian Institutes of Health Research	First author: Nigeria Last author: Unites States
Sabry (2017)	Northern Africa	Egypt (Alexandria)		Cross-sectional survey		Travel distance Trips Use of travel modes Travel purpose	Sample size: n=182 individuals Area: urban Sex: 47% males, 53% females Age: adults	No funding reported	First author: Egypt Last author: Egypt
Schuyler (2017)	Eastern Africa	Uganda (Rakai)		Repeat cross-sectional survey		Travel time Travel purpose	Sample size: n=10,042 observations Area: urban and rural Sex: 40% males, 60% females Age: adolescents and younger adults	United States of America National Institutes of Health	First author: United States of America Last author: United States of America
Tegebu (2017)	Eastern Africa	Ethiopia (Tigray)		Cross-sectional survey		Number of trips Use of travel modes Distance travelled	Sample size: n=529 households Area: rural Sex: not reported Age: not reported	No funding reported	First author: Ethiopia Last author: Ethiopia

Thaba (2017)	Southern Africa	South Africa (Johannesburg)		Cross-sectional survey		Transport mode use (cycling)	Sample size: n=480 individuals Area: urban Sex: not reported Age: university students	No funding reported	First author: South Africa Last author: South Africa
Acheampong (2018)	Western Africa	Ghana (Tamale)		Cross-sectional survey		Cycling	Sample size: n=455 individuals Area: urban Sex: 59% males, 41% females Age: adults	No funding reported	First author: Ireland Last author: Hong Kong
Baouni (2018)	Northern Africa	Algeria (Algiers)		Cross-sectional survey		Public transport	Sample size: n=347 individuals Area: urban Sex: 49% males, 51% females Age: adolescents and adults	No funding reported	First author: Algeria Last author: Spain
Chakwizira (2018)	Southern Africa	South Africa (Gauteng province)		Cross-sectional survey		Travel time Use of travel modes Travel purpose	Sample size: n=1,150 individuals Area: urban Sex: males and females Age: adults	No funding reported	First author: South Africa Last author: Nigeria
El-Sherbiny (2018)	Northern Africa	Egypt (Fayoum governorate)		Cross-sectional survey		Active travel time	Sample size: n=5,000 individuals Area: urban and rural Sex: 46% males, 54% females Age: adolescents and adults	No funding reported	First author: Egypt Last author: Egypt
Lengana (2018)	Southern Africa	South Africa (Johannesburg)		Cross-sectional survey		Travel mode use	Sample size: n=125 individuals Area: urban Sex: not reported Age: between the ages of 18 to 60	No funding reported	First author: South Africa Last author: South Africa
Tembe (2018)	Eastern Africa	Kenya (Nairobi) Mozambique (Maputo)		Cross-sectional survey		Use of travel modes Travel purpose	Sample size: n=71,545 individuals Area: urban Sex: males and females	Japan International Cooperation Agency	First author: Japan

							Age: adolescents and adults		Last author: Japan
Scordia (2018)	Southern Africa	South Africa (Johannesburg)		Cross-sectional survey		Travel distance Travel mode use	Sample size: not reported Area: urban Sex: not reported Age: not reported	No funding reported	First author: United States Last author: United States
Vancampfort (2018)	Western Africa Southern Africa	Ghana South Africa		Cross-sectional survey		Time in active travel	Sample size: n=1975 (Ghana), n=1484 (South Africa) Area: not reported Sex: not reported Age: adults	ISCIH - General Branch Evaluation and Promotion of Health Research The European Regional Development Fund (ERDF-FEDER) National Institute for Health Research Collaboration for Leadership in Applied Health Research & Care Funding scheme.	First author: Belgium Last author: Spain
Davy (2019)	Southern Africa	South Africa (Durban)		Cross-sectional survey		Travel time	Sample size: n=10 individuals Area: urban Sex: 50% males, 50% females Age: adults	No funding reported	First author: South Africa Last author: South Africa
Oyeyemi (2019)	Western Africa	Nigeria (Maiduguri)		Cross-sectional survey		Walking	Sample size: n=353 individuals Area: urban Sex: 60% males, 40% females Age: older adults	No funding reported	First author: Nigeria Last author: Nigeria

GIS – geographic information system

File S10. Exposures and definitions identified in Analysis 1.

Theme	Factor	Definition
Individual characteristics	SES (broadly defined)	It comprises any of the following factors reported by participants: individual or household socioeconomic status, household assets, household size, education level, employment status, occupation, income, vehicle ownership, bike ownership, family composition, family size, phone ownership (household), type of livelihoods (home-based enterprise, enterprise operators whose business is located elsewhere and itinerant workers), purchasing power and thus wealth
Individual characteristics	Area of residence (broadly defined)	It comprises any of the following factors reported by participants: living in slums, urban or rural dwellers, area of residence, distance needed to travel, proximity to BRT, city of residence
Individual characteristics	Sex	Sex of the participants
Individual characteristics	Age	Age of the participants
Individual characteristics	Country	Country of residence of the participant
Individual characteristics	Health status	Self-reported health status of the participants
Individual characteristics	Attitude towards particular travel modes	Attitudes and perceptions in relation to a mode
Individual characteristics	Trip purpose	Reasons for journey such as health- or work-related trips
Individual characteristics	Ethnicity	The fact or state of belonging to a social group that has a common national or cultural tradition
Individual characteristics	Marital status	One's situation with regard to whether one is single, married, separated, divorced, or widowed.
Individual characteristics	Ability to cycle	Participant's perceived (lack of) cycling skills or confidence in cycling skills or perception of not being fit or well enough to cycle
Individual characteristics	Reason for travel	Either for recreation purposes, work purposes, study purposes or other reasons
Individual characteristics	Life events/shocks	Change in personal circumstances either by 'life shocks' consisting of incidents (e.g., mugging) or by 'life events' consisting of life stage events (e.g., graduated from school), relocation events (e.g., moved house), mobility events (e.g., bought car)
Individual characteristics	Knowledge about travel modes	Participants' lack of awareness on how to use and navigate the transport system

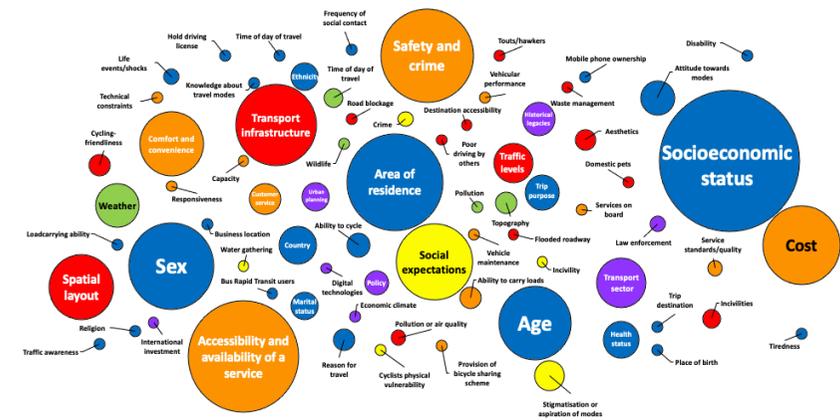
Individual characteristics	Business location	Participants' physical distance of their business from other parts of the city, also considering the perceptions of the terrain to be crossed including muddy, dusty, and poor-quality roads to reach the location.
Individual characteristics	Tiredness	Participant's consideration of the bodily energy required to move
Individual characteristics	Trip destination	Place to which participants are journeying
Individual characteristics	BRT users	Passengers utilising the BRT service
Individual characteristics	Time of day of travel	Temporal distribution of trips characterized by peak-hour periods
Individual characteristics	Traffic awareness	Participant's traffic education/ enlightenment
Individual characteristics	Place of birth	Place where the participant was born
Individual characteristics	Hold driving license	Participants holding a valid and official permission to drive a car
Individual characteristics	Religion	It refers to participant's religion being the same or different from neighbour's religion as a factor of frequency of social walking
Individual characteristics	Frequency of social contact	Frequency of social meetings, such as social walking journeys, often taking place via foot
Individual characteristics	Disability	Disability status not further described by authors
Individual characteristics	Load carrying ability	Referred as head loading or portering
Individual characteristics	Mobile phone ownership	When considered as a mean to organise travel or as a substitutive of physical travel. Otherwise, factor included under SES
Travel mode characteristics	Safety/crime	It comprises any of the following factors reported by participants: safety (e.g., road traffic accidents, injuries, or fatalities), crime (e.g., interpersonal violence, harassment, mugging), behaviour of driver, security
Travel mode characteristics	Cost	It comprises any of the following factors reported by participants: ticket cost, price stability, affordability,
Travel mode characteristics	Comfort/convenience	The degree of ease or convenience. It comprises cleanliness and availability of space/seating (whether a service had seating ready for use)
Travel mode characteristics	Customer service	The interaction between the consumer/transport user and a representative of that mode of travel

Travel mode characteristics	Accessibility/Availability of a service	It comprises any of the following factors reported by participants: accessibility, availability of services, speed (e.g., traffic jam, delays, travel time), reliability, waiting time, flexibility (door-to-door service/stops), timeliness/punctuality, time efficiency (working/operating quickly and effectively with regards to time management), frequency of trip departures, distance to public transport stop, operating hours, connection with other modes, time consistency, route frequency
Travel mode characteristics	Vehicle maintenance	Service/repair of motor vehicles
Travel mode characteristics	Service standards/quality	The quality of a service
Travel mode characteristics	Ability to carry loads	The ability to carry objects over distances
Travel mode characteristics	Services on board	Services provided on board
Travel mode characteristics	Better vehicular performance	Less pollution/emission of smoke of a vehicle
Travel mode characteristics	Capacity	The number of people a service can accommodate
Travel mode characteristics	Responsiveness	The readiness with which service to respond to complaints/suggestions of improvement
Travel mode characteristics	Technical constraints	The degree to which a service is affected by vehicle breakdowns
Travel mode characteristics	Provision of bicycle sharing scheme	A system in which bikes are shared among users
Built environment	Domestic pets (dogs)	Presence of domestic 'guard' dogs in the neighbourhood as a concern of safety for many children and adults' mobilities
Built environment	Spatial layout	It comprises any of the following factors reported by participants: population density, urban sprawl, land use mix, street connectivity, city layout and city design
Built environment	Transport infrastructure	It comprises any of the following factors reported by participants: transport infrastructure, sidewalk quality, street-crossing quality, cycle path quality, bicycle lanes, road quality, speed management infrastructure (measures to increase compliance with speed limits such as speed humps and raised platforms), street lighting (presence of street-lights on the edge of a road or path).
Built environment	Traffic levels	General levels of traffic including traffic volumes
Built environment	Pollution or air quality	Level of air pollution in the area

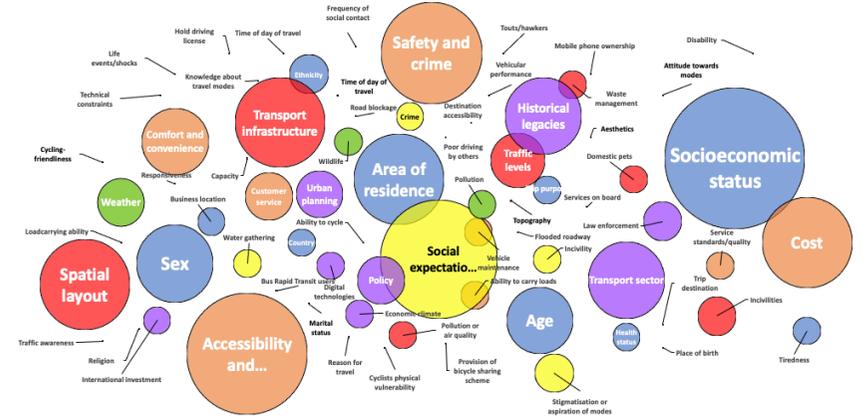
Built environment	Aesthetics	Pleasantness of the area perceived by participants, green space
Built environment	Incivilities	Behaviour perceived as anti-social by participants such as waste blocking road and behaviours by street youths
Built environment	Waste management	Management of solid waste in the area causing blockage on the road and pollution
Built environment	Cycling-friendliness	It comprises any of the following factors reported by participants: availability of alternative roads (alternative roads available to cyclists), difficult road junctions (road junctions perceived to be difficult to navigate by cyclists), on-street parking (on-street parking causing obstruction to cyclists), blockages on neighbourhood routes (blockages in neighbourhoods causing obstruction to cyclists)
Built environment	Destination accessibility	Car accessibility at the destination e.g., parking space
Built environment	Poor driving by other drivers	Inconsiderate driving behaviour such as stopping in the middle of the road and cutting in front of others
Built environment	Flooded roadway	Road subjected to flooding
Built environment	Road blockages	Any obstruction on the road such as police checkpoints, road construction, oil tankers and vehicle breakdowns
Built environment	Area boys/touts/hawkers	People attempting to sell things on the side of the road
Socio-cultural environment	Social expectations (broadly defined)	It comprises any of the following factors reported by participants: social norms, gender roles, religious norms, cultural norms, social inclusion, generational relations, mode seen as cool, mode recommended by friends, attitudes of parents/teachers/peers towards mode, parental rules
Socio-cultural environment	Stigmatisation/aspiration of particular travel modes	It refers to the population's image or perception of the mode (e.g., condemning/lauding certain travel modes)
Socio-cultural environment	Incivilities	Societal anxieties in relation to crime and danger
Socio-cultural environment	Crime	Level of crime in the area
Socio-cultural environment	Water gathering	Cultural and social underpinnings of inadequate access to water
Socio-cultural environment	Physical vulnerability riding bicycles	The perceived physical vulnerability of girls, particularly in relation to reproductive health, when riding bicycles
Natural environment	Weather	It comprises any of the following factors reported by participants: climate (e.g., rainy vs. dry season), weather (e.g., hot temperatures), wind

Natural environment	Pollution	Introduction of harmful materials into the environment
Natural environment	Time of day of travel	Daylight travel versus darkness or night-time travel
Natural environment	Topography (flat landscape)	It comprises any of the following factors reported by participants: topography (flat landscape), hilliness, terrain, altitudes
Natural environment	Wildlife	Wild animals near roads
Policy or political environment	Transport sector	It comprises any of the following factors reported by participants: transport regulations, taxes, regional or national travel budgets, regional or national travel policies
Policy or political environment	Urban planning sector	Design and regulation of urban environment including renewal
Policy or political environment	Policy environment	Wider policy environment including corruption, mismanagement, coordination, and multi-sectoral engagement
Policy or political environment	Historical legacies	Legacies of historical events such as apartheid, colonisation, war, and globalisation. It includes class or racial-residential segregation as legacy of apartheid
Policy or political environment	Digital technologies	Virtual mobility using digital technologies to share videos and images of different places
Policy or political environment	Law enforcement	Policing on the streets including removal and dispersal of homeless people and street youths
Policy or political environment	Economic climate	Factors affecting economy in a city such as investments from private companies and city or federal governments
Policy or political environment	International investment	Investment into transport infrastructure by international institutions

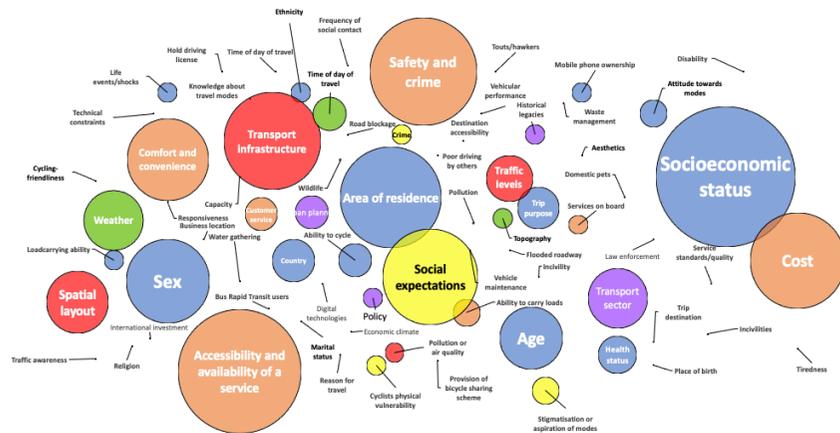
File S11. All exposures and by study design identified in Analysis 1.



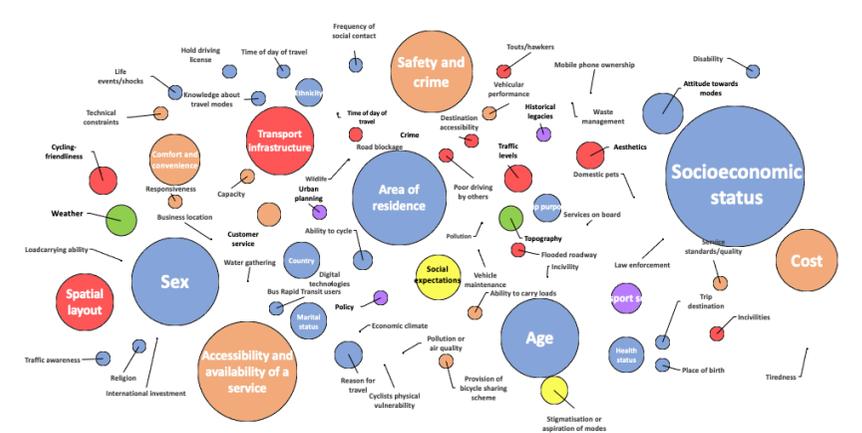
All studies



Qualitative studies



Mixed methods studies



Quantitative studies

Figure S11. Frequency of all exposures identified in the literature, grouped by thematic set (represented by different colours) and by study design. The size of the bubbles represents the percentage of exposure over total. Figure created using Microsoft Excel.

	Exposure	All studies		Qualitative studies		Mixed methods studies		Quantitative studies	
		% over category	% over all	% over category	% over all	% over category	% over all	% over category	% over all
Individual characteristics	Socioeconomic status	39.2	17.5	14.1	2.5	29.3	5.1	56.5	9.9
	Area of residence	18.3	8.2	12.4	1.0	32.6	2.7	55.1	4.5
	Sex	14.4	6.4	11.4	0.7	28.6	1.8	60.0	3.8
	Age	10.5	4.7	11.8	0.5	21.6	1.0	66.7	3.1
	Country	2.7	1.2	7.7	0.1	38.5	0.5	53.8	0.6
	Health status	2.5	1.1	8.3	0.1	33.3	0.4	58.3	0.6
	Attitude towards modes	2.3	1.0	0.0	0.0	18.2	0.2	81.8	0.8
	Trip purpose	2.3	1.0	9.1	0.1	45.5	0.5	36.4	0.4
	Ethnicity	1.4	0.6	28.6	0.2	14.3	0.1	57.1	0.4
	Marital status	1.4	0.6	0.0	0.0	0.0	0.0	100.0	0.6
	Ability to cycle	1.0	0.5	0.0	0.0	60.0	0.3	40.0	0.2
	Reason for travel	0.8	0.4	0.0	0.0	0.0	0.0	100.0	0.4
	Life events/shocks	0.4	0.2	0.0	0.0	50.0	0.1	50.0	0.1
	Hold driving license	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Knowledge about travel modes	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Business location	0.2	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	Tiredness	0.2	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	Trip destination	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Bus Rapid Transit users	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Time of day of travel	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1
Traffic awareness	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1	
Place of birth	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1	
Religion	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1	
Frequency of social contact	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1	
Disability	0.2	0.1	0.0	0.0	0.0	0.0	100.0	0.1	
Loadcarrying ability	0.2	0.1	0.0	0.0	100.0	0.1	0.0	0.0	
Mobile phone ownership	0.2	0.1	0.0	0.0	100.0	0.1	0.0	0.0	
Travel mode characteristics	Accessibility and availability of a service	36.8	10.8	16.9	1.8	37.3	4.0	45.8	4.9
	Safety and crime	26.2	7.7	16.7	1.3	39.3	3.0	44.0	3.4
	Cost	18.1	5.3	19.0	1.0	44.8	2.4	36.2	1.9
	Comfort and convenience	12.1	3.6	15.4	0.5	48.7	1.7	35.9	1.3
	Customer service	2.8	0.8	33.3	0.3	33.3	0.3	33.3	0.3
	Ability to carry loads	1.2	0.4	25.0	0.1	50.0	0.2	25.0	0.1
	Service standards/quality	0.6	0.2	50.0	0.1	0.0	0.0	50.0	0.1
	Vehicle maintenance	0.3	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	Services on board	0.3	0.1	0.0	0.0	100.0	0.1	0.0	0.0
	Vehicular performance	0.3	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Capacity	0.3	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Responsiveness	0.3	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Technical constraints	0.3	0.1	0.0	0.0	0.0	0.0	100.0	0.1
Provision of bicycle sharing scheme	0.3	0.1	0.0	0.0	0.0	0.0	100.0	0.1	
Built Environment	Transport infrastructure	46.0	5.8	17.5	1.0	42.9	2.5	39.7	2.3
	Spatial layout	29.2	3.7	27.5	1.0	27.5	1.0	45.0	1.6
	Traffic levels	10.2	1.3	28.6	0.4	42.9	0.5	28.6	0.4
	Aesthetics	2.9	0.4	0.0	0.0	0.0	0.0	100.0	0.4
	Cycling-friendliness	2.9	0.4	0.0	0.0	0.0	0.0	100.0	0.4
	Incivilities	2.2	0.3	66.7	0.2	0.0	0.0	33.3	0.1
	Pollution or air quality	1.5	0.2	50.0	0.1	50.0	0.1	0.0	0.0
	Waste management	0.7	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	Destination accessibility	0.7	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Poor driving by others	0.7	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Flooded roadway	0.7	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Road blockage	0.7	0.1	0.0	0.0	0.0	0.0	100.0	0.1
	Area boys/Touts/Hawkers	0.7	0.1	0.0	0.0	0.0	0.0	100.0	0.1
Domestic pets (dogs)	0.7	0.1	100.0	0.1	0.0	0.0	0.0	0.0	
Socio-cultural environment	Social expectations	81.2	5.1	33.9	1.7	46.4	2.4	19.6	1.0
	Stigmatisation or aspiration of modes	11.6	0.7	25.0	0.2	25.0	0.2	50.0	0.4
	Crime	2.9	0.2	50.0	0.1	50.0	0.1	0.0	0.0
	Incivility	1.4	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	Water gathering	1.4	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	Physical vulnerability riding bicycles	1.4	0.1	0.0	0.0	100.0	0.1	0.0	0.0
Natural environment	Weather	66.7	1.6	16.7	0.3	55.6	0.9	27.8	0.5
	Topography	14.8	0.4	0.0	0.0	25.0	0.1	75.0	0.3
	Time of day of travel	11.1	0.3	0.0	0.0	100.0	0.3	0.0	0.0
	Wildlife	3.7	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	Pollution	3.7	0.1	100.0	0.1	0.0	0.0	0.0	0.0
Policy or political environment	Transport sector	46.0	2.1	34.8	0.7	43.5	0.9	21.7	0.5
	Historical legacies	20.0	0.9	80.0	0.7	10.0	0.1	10.0	0.1
	Urban planning	14.0	0.6	42.9	0.3	42.9	0.3	14.3	0.1
	Policy	10.0	0.5	60.0	0.3	20.0	0.1	20.0	0.1
	Law enforcement	4.0	0.2	100.0	0.2	0.0	0.0	0.0	0.0
	Digital technologies	2.0	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	Economic climate	2.0	0.1	100.0	0.1	0.0	0.0	0.0	0.0
	International investment	2.0	0.1	100.0	0.1	0.0	0.0	0.0	0.0

File S12. Meta-method.

Qualitative studies (N=20)			Mixed-methods studies (N=27)			Quantitative studies (N=71)		
Method	Number of times reported	Frequency of method within study design (%)	Method	Number of times reported	Frequency of method within study design (%)	Method	Number of times reported	Frequency of method within study design (%)
Focus groups	12	20	Survey ³	24	27	Survey ³	68	91
Participants interviews ¹	8	13	Participants interviews ¹	15	16	Secondary data	3	4
Key informants' interviews ²	7	12	Key informants' interviews ²	12	14	Accelerometry	2	3
Survey ³	4	7	Focus groups	9	10	Field observations ⁴	1	1
Field observations ⁴	4	7	Field observations ⁴	8	9	Spatial analysis (mapping)	1	1
Photo-elicitation	3	5	Geographic Information	4	5	Total:	75	100
Life-story interviews	3	5	Life-story interviews	3	3			
Neighbourhood walkabouts	2	3	Stopwatch and traffic congestion registration	3	3			
Individual conversations	2	3	Photo-elicitation	2	2			
Written diaries	2	3	Transect walks	2	2			
Brainstorming diagrams	1	2	Policy analysis	1	1			
Drawing and painting exercises	1	2	Written diaries	1	1			
Collage	1	2	Participatory mapping	1	1			
Spatial analysis (mapping)	1	2	Spatial analysis (mapping)	1	1			
Drama and role-play	1	2	Land use maps and plans	1	1			
Phone analyses	1	2	Reconnaissance surveys	1	1			
Debate	1	2	Road accident analysis	1	1			
Policy analysis	1	2	Total:	89	100			
Community visioning workshops	1	2						
'Hanging out' and 'moving along'	1	2						
Life-line interviews	1	2						
Transect walks	1	2						
Action research	1	2						
Total:	60	100						

¹ Participants interviews: un-structured or semi-structured; ² Key informants' interviews: in-depth interviews or stakeholders or topic experts; ³ Survey: structured questionnaire either self-completed or administered by face-to face or by phone interview; ⁴ Field observations: field notes or participants' observations; ⁵ Secondary data analysis: census statistics or other available datasets

File S13. Meta-theory.

All studies			
Study design	Number of included studies	Number of studies reporting theory	Studies reporting theory (%)
Qualitative studies	20	10	50.0
Mixed-methods studies	27	8	29.6
Quantitative studies	71	10	14.1
Total	118	28	23.7

Qualitative studies		
Theory	Number of studies reporting theory	Studies reporting theory within study design (%)
Mobilities paradigm	6	60
Social exclusion	1	10
Gendered discourse	1	10
Theory of planned behaviour	1	10
Kaufmann's typology of mobility	1	10

Mixed-methods studies		
Theory (<i>discipline</i>)	Number of studies reporting theory	Studies reporting theory within study design (%)
Hägerstrand's space-time framework (<i>human geography</i>)	2	25
Behavioural change transactional model	1	12.5
Political economy perspective	1	12.5
Maslow's hierarchical pyramid of human needs (<i>sociology</i>)	1	12.5
Kaufmann's 'motility' concept (<i>human geography</i>)	1	12.5
Person-centred framework linking transport and wellbeing (<i>human geography</i>)	1	12.5
Social and economic exclusion (<i>sociology</i>)	1	12.5

Quantitative studies		
Theory	Number of studies reporting theory	Studies reporting theory within study design (%)
Mobilities paradigm	9	90
Stages of change model	1	10