Research Protocol for Complete Streets

Prepared by the Policy Surveillance Program Staff

July 2020
RESEARCH PROTOCOL
July 2020

Complete Streets

I. Date of Protocol: July 2020

II. Scope: Collect, code, and analyze state laws and policies implementing Complete Streets policies. Complete Streets are designed to balance the priorities of all users including motorists, pedestrians, bicyclists and transit users to ensure that the streets are safe and accessible for everyone regardless of age or ability.

This cross-sectional dataset captures important features of state Complete Streets laws and policies in effect as of July 1, 2020 for 50 states and the District of Columbia.

III. Primary Data Collection

a. Project dates: October 2019 – July 2020

b. Dates covered in the dataset: This is a cross-sectional dataset analyzing state Complete Street laws and policies effective as of July 1, 2020.

The effective date listed for each state is the date of the most recent version of the law or regulation within that state. If more than one law or regulation is included in the legal text for a state, the effective date reflects the date of the most recently amended or enacted law or regulation within the legal text.

c. Data Collection Methods: The research team (“Team”) consisted of two legal researchers (Researchers) and one supervisor (Supervisor). Westlaw Next and state legislature websites were used to identify which states had Complete Street laws and policies in effect as of July 1, 2020. A subject matter expert from Smart Growth America as well as secondary sources from that organization were consulted to assist with defining the scope of the laws included in this dataset.

d. Databases Used: Research was conducted using Westlaw Next, state-specific legislature websites, and secondary sources such as Smart Growth America.

i. Full text versions of the laws collected were collected from each respective state legislature website.

e. Search Terms:

i. Keyword searches:

a. “complete streets”
b. “all ages”
c. “all abilities”
d. “accommodates all users”

ii. Key word searches were supplemented by reviewing the table of contents in transportation chapters.

iii. Once all the relevant statutes and regulations were identified for a jurisdiction, a Master Sheet was created for each jurisdiction. The Master Sheet for each jurisdiction includes the most recent statutory history for each statute and regulation. The most recent effective dates, or the date when a version of law or regulation becomes enforceable, are recorded for each relevant statute and regulation.

iv. All 51 jurisdictions were 100% independently, redundantly researched to confirm that all relevant law was collected by the Researchers.

v. Divergences, or differences between the original research and redundant research, were reviewed by the Supervisor and resolved by the Team.

f. Initial Returns and Additional Inclusion or Exclusion Criteria: Included laws and policies pertaining to Complete Streets.

i. The following variables were included in the state Complete Streets dataset:
   - State laws and policies regarding Complete Streets
   - Mandatory compliance
   - Departments assigned implementation
   - Policy accommodates all ages
   - Policy accommodates all abilities
   - Specific users the policy accommodates
   - Requiring context sensitivity
   - Projects that trigger the policy
   - Performance measures
   - Periodic review of policy

ii. The following variables were excluded in the state Complete Streets dataset:
   - Non-comprehensive plans that address only one or two types of transportation
   - Master plans
   - Vision zero plans
   - Design guidelines
   - Other similar documents
   - Emergency suspensions of Complete Streets policies due to the COVID-19 pandemic

IV. Coding

a. Development of Coding Scheme: The Team conceptualized coding questions, and then circulated them to a subject matter expert for review. When the questions were finalized, the Team entered them into MonQcle, a web-based software-coding platform. The Team then used the collected law built on MonQcle to answer the developed question set.
b. Coding methods: Researchers coded responses based on objective, measurable aspects of the law. Caution Notes were provided to explain any unique regulations and/or where the law was unclear. Generally, and unless explicitly caution noted in the dataset, multiple policies were read and coded as working together. See California as an example.

Below are specific rules used when coding the questions and responses in the state Complete Streets policy dataset. Not every dataset question is included in the section below. Only questions and responses that required an explanation of the legal text used to code are listed.

**Question 1:** "Does the state have a Complete Streets policy?"
- Policy includes laws, regulations, and departmental policies.
  Departmental policies are policies that are created by the departments and agencies that oversee and implement Complete Streets. These policies may be found on agency websites or in departmental orders or directives.
- Policy does not include Master Plans, Vision Zero policies, design guidelines, reports or other similar documents. Policies must be comprehensive Complete Streets and do not include policies that apply solely one or two types of transportation.

**Question 3:** "Does the policy assign a specific entity or entities to oversee implementation?"
- The entity assigned to oversee implementation may be a committee/advisory board, state department of transportation, or a similar governmental department.

**Question 4:** "Is there a deadline by which implementation of the policy must be completed?"
- The effective date of the policy is the date in which the policy becomes effective and enforceable, this differs from implementation dates. Implementation is when the requirements of the policy must be carried out.

**Question 7:** "How does the policy address inclusion of all ages?"
- Some policies state that they will accommodate “all users” without stating explicitly which users it must accommodate, if this is the case code “Inclusion of all ages not addressed.” Only code “Required” or “Recommended” when the language “all ages” appears or when the policy makes reference to children, elderly etc.

**Question 8:** "How does the policy address inclusion of all abilities?"
- Some policies state that they will accommodate “all users” without stating explicitly which users it must accommodate, if this is the case code “Inclusion of all abilities not addressed.” Only code “Required” or “Recommended” when the language “all abilities”
appears or when the policy makes reference to the Americans with Disabilities Act or people with disabilities.

**Question 9:** "What specific users does the policy address?"
- "Commercial vehicles" includes freight, delivery vehicles, and trucks.
- Public transit users should be coded when public transit vehicles must be accommodated.
- If the policy requires accommodating “vehicle operators” or “motorized transportation” then “motorists,” “emergency vehicles,” and “commercial vehicles” should be coded.
- Utah Policy, Inclusion of Active Transportation UDOT 07-117 includes a definition of “active transportation” that was determined to be inclusive enough to include “public transit users,” “motorists,” “emergency vehicles,” and “commercial vehicles.”

**Question 11:** “What types of projects trigger the policy?”
- Resurfacing projects and minor improvements are considered maintenance projects.
- Reconstruction projects are considered construction projects not maintenance projects.

**Question 12:** “Are performance measures included in the policy?”
- Performance measures refers to information on when and how a program will be evaluated.

**Question 12.1:** "How is performance measured?"
- “Amount of bike lanes constructed” should not be coded if the policy measures performance based on shared bike lines rather than dedicated bike lines.
- Whenever “Percentage of projects including Complete Street measures” is coded, a caution note should be added with an explanation of the Complete Streets measures.

**V. Quality Control**

**i. Original coding:** Quality control of the original coding consisted of the Supervisor exporting the data into a Microsoft Excel document each day the Researchers completed coding to examine the data for any missing entries, citations, and caution notes.

**ii. Redundant coding:** The redundant coding process is 100% independent, redundant coding by two Researchers of each jurisdiction. Redundant coding means that each jurisdiction (a record) is assigned and coded independently by the two Researchers. Divergences, or differences between the original coding and redundant coding, are resolved through consultation and discussion with subject matter experts and the Team.
Quality control of the redundant coding consisted of the Supervisor exporting using the Redundant Coding Review tool on MonQcle. 100% of the records were redundantly coded throughout the life of the project.

After coding the first 10 jurisdictions (Batch 1), the rate of divergence was 11.67% on February 20, 2020. A coding review meeting was held, and all divergences were resolved. Questions and answer choices that led to confusion were edited for clarity and then checked across the dataset to make sure coding was consistent. The Supervisor assigned the next 21 jurisdictions (Batch 2) for 100% redundant coding and the rate of divergence dropped to 9.1% on May 4, 2020. Again, a coding review meeting was held, and all divergences were resolved. The Supervisor then assigned 100% redundant coding of the next 20 jurisdictions (Batch 3) and the divergence rate was .01% on July 10, 2020. Divergences were again resolved through consultation and discussion with the Team.

iii. **Post-production statistical quality control:** To ensure reliability of the data, a statistical quality control procedure (SQC) is run once all of the original and redundant coding is finished. To conduct SQC, the Supervisor takes a random sample of variables from the dataset for the Researchers to independently code. SQC occurs until divergences are below 5%. The Supervisor ran SQC after the dataset was completed on July 13, 2020. At that time, the divergence rate was 2.56%. Each divergence was then reviewed as a team and resolved. These divergences were reviewed and resolved as a Team.

iv. **Final data check:** Once all of the coding and quality control was completed, the Researchers checked the final coding results against a secondary source. The secondary source used for comparison was the Policy Inventory from Smart Growth America. Prior to publication, the Supervisor downloaded all coding data into Microsoft Excel to do a final review of coding answers, statutory and regulatory citations, and caution notes.