

Research Protocol for CityHealth: Complete Streets

Prepared by Center for Public Health Law Research

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CITYHEALTH: COMPLETE STREETS

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Research Protocol

- I. Dates of Protocol: June 15, 2016; October 27, 2016; February 3, 2017; January 29, 2018; June 7, 2019; October 22, 2019; November 19, 2020; August 26, 2021
- II. Scope: Compile statutes, ordinances, and policies on comprehensive Complete Streets programs across the 40 largest cities, their respective counties, 25 states and the District of Columbia. The purpose of the CityHealth project is to collect important public health policies and determine what makes a healthy city. For a particular health policy, the goal is to display the state, county, and city law involved in shaping this policy at the city level. This dataset contains coding questions examining comprehensive Complete Streets programs. This is a cross-sectional dataset capturing currently effective law valid through June 1, 2021.

III. Primary Data Collection

- a. Original project dates: April 18, 2016 June 15, 2016
- b. Original dates covered in the dataset: December 29, 2014 April 1, 2016
- c. Data collection methods: The team building this dataset consisted of three team members: two legal researchers ("Researchers") and one supervisor ("Supervisor") overseeing the quality control process.
- d. Databases used: Searches conducted using Westlaw Next, city and county codes, and general Complete Streets websites; the laws were then collected from state-specific legislature websites. County and city laws were collected from official government websites, municode.com and amlegal.com. Policies were collected from the Department websites.
- e. Search terms: "complete streets", "complete streets policy", "complete streets ordinances", livable streets, bike plan, transportation plan, city bicycles
 - i. Key word searches were supplemented by examination of the table of contents of each relevant section of the law identified.
 - ii. Once all the relevant laws were identified in each jurisdiction, a master sheet was created for each jurisdiction that summarized the relevant laws within the scope at each jurisdictional level. This summary included the statutory history for each law and the effective date for that version of the law.
- f. Information about initial returns and additional inclusion or exclusion criteria: After consultation with the client, the team decided to focus solely on Complete Streets policies and scoped out any Vision Zero plans, which aim to eliminate all traffic casualties. The team decided that "policy" should include state, county, regional, or city resolutions, ordinances, statutes, regulations, policy directives and executive orders. "Policy" did not include those passed by federally mandated metropolitan planning organizations (MPOs). Many secondary sources also reference internal city plans, master plans, or tax laws. These internal plans



were noted by the Researchers but excluded from collection. Preemption and city authority laws were also deemed beyond the scope for this dataset.

i. In determining whether a city, county, or state law or policy represented a comprehensive Complete Streets policy, the team looked for the elements of complete streets policies as outlined by Smart Growth America's National Complete Streets Coalition. The team was also looking for a succinct and comprehensive program within a singular area of the law. Although some cities may have standalone transportation policies organized by the mode of transportation that share the ultimate goals of a complete streets program, they were deemed out of scope for this version of the dataset. A future version of this dataset may be able to go beyond the comprehensive complete streets programs and attempt to capture such transportation policies, with more time allotted for research.

IV. Coding

- a. Development of coding scheme: The Researchers and Supervisor drafted coding questions and circulated them for review until all parties felt they had been sufficiently refined. Once the coding questions were finalized, they were entered into the MonQcle. In general, for the questions on modes of transportation, accommodation of all ages, and accommodation of all abilities, the Researchers were looking for explicit language identifying actual modes of transportation as well as explicit mentions of "age" and "abilities." No inferences were made for laws or policies that simply said "all users;" the Researchers only coded users that were explicitly defined either by mode of transportation, age, and/or ability.¹
 - i. For the question, "What modes of transportation does the Complete Streets Policy accommodate," the answer choice "Commercial vehicles" was meant to include freight and delivery vehicles. For cities that went beyond the listed answer choices, the Researchers coded "Other" and added a caution note explaining the additional mode unique to that city.
 - ii. For the question, "Does the Complete Streets Policy explicitly accommodate all ages," the Researchers only coded "Yes" if the policy explicitly includes that all ages will be accommodated. The Researchers also coded "Yes" if the policy directly mentions that it will account for elderly and child users.
 - iii. For the question, "Does the Complete Streets Policy accommodate all abilities," the Researchers would also code "Yes" if there was a reference to the Americans with Disabilities Act.
 - iv. For the question, "Does the policy require the department to develop performance measures," performance measures included policies that provide information on when and how a program will be evaluated.
- b. Coding methods: The Researchers were responsible for coding 20 cities each, including the respective state and county laws. Both Researchers independently coded their assigned jurisdictions. After coding their first five jurisdictions each, the Researchers 100 percent redundantly coded the states to evaluate the questions and responses. The Supervisor checked all research against the redundant research conducted by the other Researcher and credible secondary sources tracking Complete Streets programs.

¹ For example, Seattle laws and policies on Complete Streets repeatedly apply to "all users" but then specify several different modes of transportation explicitly, like pedestrians, bicyclists, public transit users, and commercial drivers as well as persons of all abilities. Therefore, those specifically mentioned modes of transportation and persons of all abilities were affirmatively coded in Seattle, whereas persons of all ages was not.



- c. Quality control: The Supervisor oversaw the quality of the data by downloading the data from the MonQcle into Microsoft Excel and reviewing it in order to find caution flags, missing answer choices, and errors in the coding. An original coding review sheet was sent to the Researchers for their review. Issues in the coding were discussed by the Researchers in coding meetings and resolved accordingly.
 - i. The Supervisor reviewed the redundant coding by downloading the data from the MonQcle into Microsoft Excel and comparing the records, variable by variable, looking for divergences. When a divergence was identified, it was discussed with the researchers. The reason for the divergence was identified and resolved. A measure of divergence was calculated by the Researcher and the redundant record was deleted.
 - 1. The rate of divergence on June 13, 2016 was 5.7%. Once all of these issues were resolved, the entries were re-coded accordingly.
 - ii. After the first round of redundant coding was complete, the Supervisor asked the Researchers to go back and check all their original coding. The Supervisor then assigned 5 more states to be redundantly coded to ensure that the rate of divergence was below 5%. The Supervisor followed the process above to review the new round of redundant coding.
 - 1. The rate of divergence on June 14, 2016 was 4.28%. Once all of these issues were resolved, the entries were re-coded accordingly.
 - iii. The Supervisor then did a final check of the original coding for all states and ensured that the state coding was consistent for the Arizona, California, Tennessee, and Texas entries since these states had multiple cities included in this dataset.

V. October 2016 Update

- a. Data collection methods: One Researcher conducted research to determine if any states, counties, or cities had enacted relevant legislation effective through October 1, 2016, and to identify pending legislation that may be close to passage. The Researcher used the same search terms stated above. The Researcher found that amendments were made to laws and policies in: Boston, Detroit, Fort Worth, Fresno, Long Beach, Los Angeles, Nashville, Sacramento, San Diego, San Francisco, San Jose, and Washington, DC.
- b. Coding updated findings: The Researcher collected, built, and coded the updated laws and policies. The team then met to better clarify the scope of laws and policies included in this dataset. The team referred to the main resource on Complete Streets Laws, Smart Growth America, and analyzed their model policy and collection of all Complete Streets legislation, plans, policies, and orders. The original scoping parameters decided that "policy" should include state, county, regional, or binding city resolutions, ordinances, statutes, regulations, policy directives and executive orders. "Policy" did not include those passed by federally mandated metropolitan planning organizations (MPOs). Also excluded were internal city plans, master plans, or tax laws. To better define "policies," the team included those that covered the entire city or county and excluded those that focused on a sole neighborhood or was created by a neighborhood coalition, like an earlier policy in Fort Worth which was deemed beyond scope. Fort Worth later added a citywide Complete Streets policy in late April 2016, and this policy was included and coded. The team also looked at the compilation of policies listed by Smart Growth America. We excluded any departmental guidelines that did not apply citywide or reflect the "Elements of a Complete Street Policy" as identified by Smart Growth America. Using these clearer criteria, the team analyzed each state to ensure that the scope of sources was



consistent across all cities in this dataset. Based on this newly clarified scope, the Researchers re-coded the Complete Streets dataset, now valid through October 1, 2016.

- i. The Supervisor oversaw the quality of the data by conducting another original coding review. An original coding review sheet was sent to the Researchers for their review. Issues in the coding were discussed by the Researchers in coding meetings and resolved accordingly.
- c. Quality control: The Supervisor originally assigned five cities for redundant coding. The initial rate of divergence on October 26, 2016 was 11.60%.
 - i. The team met to discuss the coding review. The team decided that for the question, for the question, "What modes of transportation does the Complete Streets Policy accommodate," the answer choice "Commercial vehicles" should also include "trucks" based on the earlier determination that commercial vehicles includes freight and delivery vehicles.
 - ii. The Researchers also debated whether a state law should apply to a city. Specifically, there was a debate about whether a Tennessee policy should apply to Memphis and Nashville. The team discussed and determined that state policies which would apply to city to complete a local transportation project should be included when coding. This would then include a local project completed using state funds connected to a complete street policy, like in Tennessee.
 - iii. Following these clarifications, the Researchers checked their original coding and made any necessary edits. The Supervisor then assigned another five records for redundant coding and the divergence rate dropped to 2.80% on October 27, 2016. All divergences were discussed and resolved.

VI. February 2017 Update

- **a.** Prior to publication, the team reviewed several city policies that just fell beyond scope. After discussion, the team decided for consistency that these cities are still beyond the scope of the dataset, but the team would consider widening the scope during a potential future version of this dataset.
 - i. The Portland Bureau of Transportation uses design guidelines that include some complete streets elements and there are some laws encouraging better accommodations for pedestrians and bicyclists in different areas of the Code, but the city of Portland has not passed an ordinance explicitly requiring all new development to be compliant with a comprehensive complete streets policy.
 - ii. Las Vegas similarly does not have a comprehensive complete streets policy. While the city does include complete streets elements in their design guidelines and master plan, the city has not passed an ordinance explicitly requiring all new developments to be compliant with a comprehensive complete streets policy.
 - iii. Pima County has inserted complete streets principles into its design manual. In 2014, its mayor participated in the US Department of Transportation's Mayor's Challenge for Safer People and Safer Streets. However, no state, county, or city legislation has enacted a complete streets policy that includes the city of Tucson as of February 2017.



VII. December 2017 Update

- a. Data collection methods: The Researchers conducted a review of each city that included searching for amendments to laws that were previously collected, any additional laws that may be necessary, and for any new complete streets policies that had been enacted since the February 2017 update. The Researchers searched for complete streets policies in WestlawNext, Google, city ordinance databases, and city websites.
- b. Coding updated findings: In addition to researching each city for newly amended laws, additional laws, and newly enacted laws, the Researchers also made note of any potential coding inconsistencies. Fresno, Long Beach, Los Angles, Sacramento, San Diego, San Francisco, San Jose, and Phoenix had an update to their policies.

During the update research, the Researchers found a newly amended 2017 CALTRANS Pedestrian and Bicycle Plan. Although the plan would normally be out of scope for this dataset, it did lay out the framework for setting performance measures. This plan helped clarify the ambiguous mention of performance measures in the California policy that we did include in the scope. After a discussion with the Researchers and the Supervisor, the team felt like this was enough to code Yes for Performance Measures for all California cities based on the California policy.

c. Quality control: Fresno, Long Beach, Los Angles, Sacramento, San Diego, San Francisco, San Jose, Phoenix, and Kansas City were redundantly coded because there were updates to their policies. Philadelphia and Washington DC were also redundantly coded to ensure coding was correct. The Researchers compared the records and the divergence rate is 2.86%. All divergences were discussed and resolved.

The Supervisor checked the original coding to check for any other coding or building issues and found none. This dataset is now valid through December 1, 2017. The Supervisor confirmed all research and coding results against credible secondary sources tracking complete streets policies.

VIII. June 2019 Update

- a. Data collection methods: The Researchers conducted a review of each city that included searching for amendments to laws that were previously collected, any additional laws that may be necessary, and for any new complete streets policies that had been enacted since the December 2017 update. The Researchers searched for complete streets policies in WestlawNext, Google, city ordinance databases, and city websites.
- b. Coding updated findings: In addition to researching each city for newly amended laws, additional laws, and newly enacted laws, the Researchers also made note of any potential coding inconsistencies. Albuquerque, Atlanta, Baltimore, Charlotte, Fresno, Long Beach, Las Vegas, Los Angeles, Louisville, Milwaukee, Oklahoma City, Portland, Sacramento, San Antonio, San Diego, San Francisco, San Jose, Seattle and Tucson had updates to their policies.
- c. Quality control: Las Vegas, Los Angeles, Louisville, Milwaukee, Oklahoma City, Albuquerque, Atlanta, Baltimore, El Paso, Fresno, Sacramento, San Diego, San Francisco, San Jose, Tucson, Kansas City, Indianapolis, Chicago, Boston, and San Antonio were redundantly coded. The Researchers compared the records in the first round of coding for ten cities and the initial divergence rate was 12%, mostly due to confusion over the status of El Paso. We discussed the situation with the CityHealth partnership team, who was actively working with El Paso on updating their Complete Streets policy, so we decided to table the



potential change until those updates are finalized. Without El Paso, the divergence rate fell to 3.3%. All divergences were discussed and resolved. As an extra layer of quality control, another redundant coding round of ten cities was conducted, and that round yielded a 0% divergence rate.

i. The Supervisor checked the original coding to check for any other coding or building issues and any issues were resolved. We sent the preliminary results to city health department representatives for review in the event of any disagreement with our coding or to alert us to late-breaking changes. This dataset is now valid through May 1, 2019.

IX. May 2020 Update

- a. Valid through date note for all datasets: All of the CityHealth datasets that are currently published were published in December 2020. Please see the individual policy pages or protocols for the exact valid through date as not all of the datasets had the same valid through date for this update.
- b. Data collection methods: The Researchers conducted a review of each city that included searching for amendments to laws that were previously collected, any additional laws that may be necessary, and for any new complete streets policies that had been enacted since the June 2019 update. The Researchers searched for complete streets policies in WestlawNext, Google, city ordinance databases, and city websites.
- c. Coding updated findings: In addition to researching each city for newly amended laws, additional laws, and newly enacted laws, the Researchers also made note of any potential coding inconsistencies. Albuquerque, Atlanta, Baltimore, Columbus, Fresno, Long Beach, Los Angeles, Sacramento, San Diego, San Francisco, and San Jose had updates to their policies.
- d. Quality control: Albuquerque, Atlanta, Baltimore, Columbus, Fresno, Long Beach, Los Angeles, Sacramento, San Diego, San Francisco, and San Jose were redundantly coded. The Researchers compared the records and the divergence rate was 2.72%. All divergences were discussed and resolved. The Supervisor checked the original coding to check for any other coding or building issues and any issues were resolved. This dataset is now valid through May 1, 2020.

X. June 2021 Update

- a. Data collection methods: The Researchers conducted a review of each city that included searching for amendments to laws that were previously collected, any additional laws that may be necessary, and for any new complete streets policies that had been enacted since the May 1, 2020, update. The Researchers searched for complete streets policies in WestlawNext, Google, city ordinance databases, and city websites.
- b. Coding updated findings: In addition to researching each city for newly amended laws, additional laws, and newly enacted laws, the Researchers also made note of any potential coding inconsistencies. Fresno, Long Beach, Los Angeles, Sacramento, San Diego, San Francisco, San Jose, and Washington DC had non-substantive updates to their policies.
- c. Quality control: Atlanta, Fort Worth, Fresno, Long Beach, Los Angeles, Sacramento, San Diego, San Francisco, San Jose, and Washington DC were redundantly coded. The Supervisor compared the records, and the divergence rate was 0%. The Supervisor checked the original coding to check for any other coding or building issues, and any issues were resolved. This dataset is now valid through June 1, 2021.