

# Polling Places of Interest: How Where We Vote Shapes Voting Behavior

Joseph Loffredo

Massachusetts Institute of Technology



## Project Summary

When Americans cast their votes in person, what type of facility do they usually enter and how does where we vote affect voting behavior? Researchers have conceived the search costs of assigning voters to new polling locations as (1) informational costs stemming from finding new polling places and (2) risk-aversion costs associated with venturing to unfamiliar neighborhoods and places. Despite initial evidence suggesting a link between the facilities selected as polling places and voting behavior, previous work offers no clear answers on the variety or uniformity of polling place facility types. There are two goals of this project. First, I introduce a novel dataset that leverages the Google Maps and Places APIs to standardize the classification of polling place facility types used in general elections between 2012 and 2022. Second, I use voting records from the 2016 and 2020 presidential elections in Georgia to explore how assigning voters to new polling place facility types shapes voters' propensities to cast in-person or absentee ballots. In the midst of COVID-19, I find minimal effects of location reassignments on turnout, but statistically significant effects on the use of absentee voting.

## Data Collection

Using polling place location data compiled by the Center for Public Integrity and Democracy Works, Loffredo and Flores (2023) introduce a nationwide dataset of polling places in the United States used in federal general elections between 2012 and 2022. Leveraging the Google Maps and Places API to standardize and systematize the classification of facility types, these data provides information on the location, precinct assignment, and physical setting of polling places.

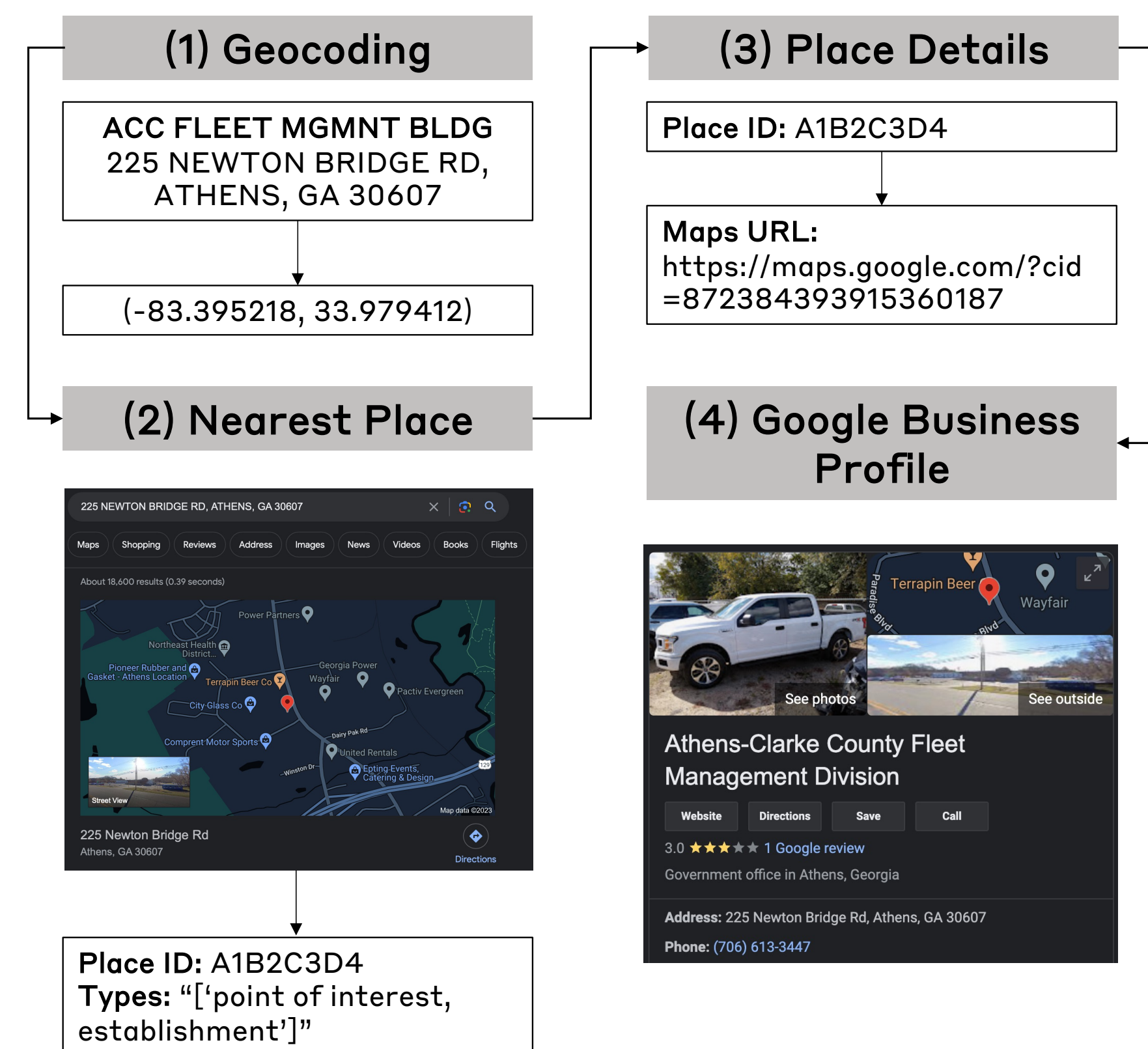


Figure 1. Polling Place Location Processing Steps

## Theoretical Grounding

In considering the effects of assigning voters to new polling places, previous work has tended to focus on two key concepts: transportation costs and search costs. Broadly, this work has found that assigning voters to new polling places has negative effects on in-person election day turnout, effects partially offset by increased use of convenience voting methods (Dyck and Gimpel 2005; Clinton et al. 2021; Tomkins et al. 2022, but see Amos, Smith and Ste. Claire, 2017). We can think of search costs in two different ways: (1) informational costs stemming from finding a new polling place and (2) risk-aversion costs associated with venturing to unfamiliar neighborhoods and places (Brady and McNulty 2011). A key factor left largely unexamined is the facility types of polling places. Previous research has noted the positive effects of using "socially familiar and frequented venues" as early voting sites (Stein and Garcia-Monet 1997). Other work has remarked on how the implementation election day vote centers, often situated in more centrally located, identifiable, and large-scale sites, has positive effects on voter turnout. One possible explanation for these effects is that larger polling sites, in places like hotels, arenas, or community centers, are often found along major roadways, provide more parking, and reduce search costs by being in more familiar, visible, and accessible locations in a voter's community (Stein and Vonnahme 2008). Despite that, the omission of facility type as a variable in previous work is due to the fact that no standardized and systematic data exists on the venues used as polling places.

## Polling Places in Georgia

From Loffredo and Flores (2023), polling places used in Georgia can be classified using the following categories: Bank/Post Office, College, Community Space (e.g., parks, community centers, banquet halls, fitness centers), Government Office (e.g., city halls, courthouse, government agency offices), Library, Medical (e.g., doctor's office, hospital, pharmacy), Place of Business (e.g., store, shop, restaurant), Place of Worship (e.g., church, synagogue, mosque), Public Safety Facility (e.g., police precinct, fire station, EMS headquarters), Residential (e.g., apartment complex, HOA headquarters), School Building, Senior Center (e.g., nursing home, retirement community), Stadium/Arena, and Transit Center (e.g., subway stop, bus station).

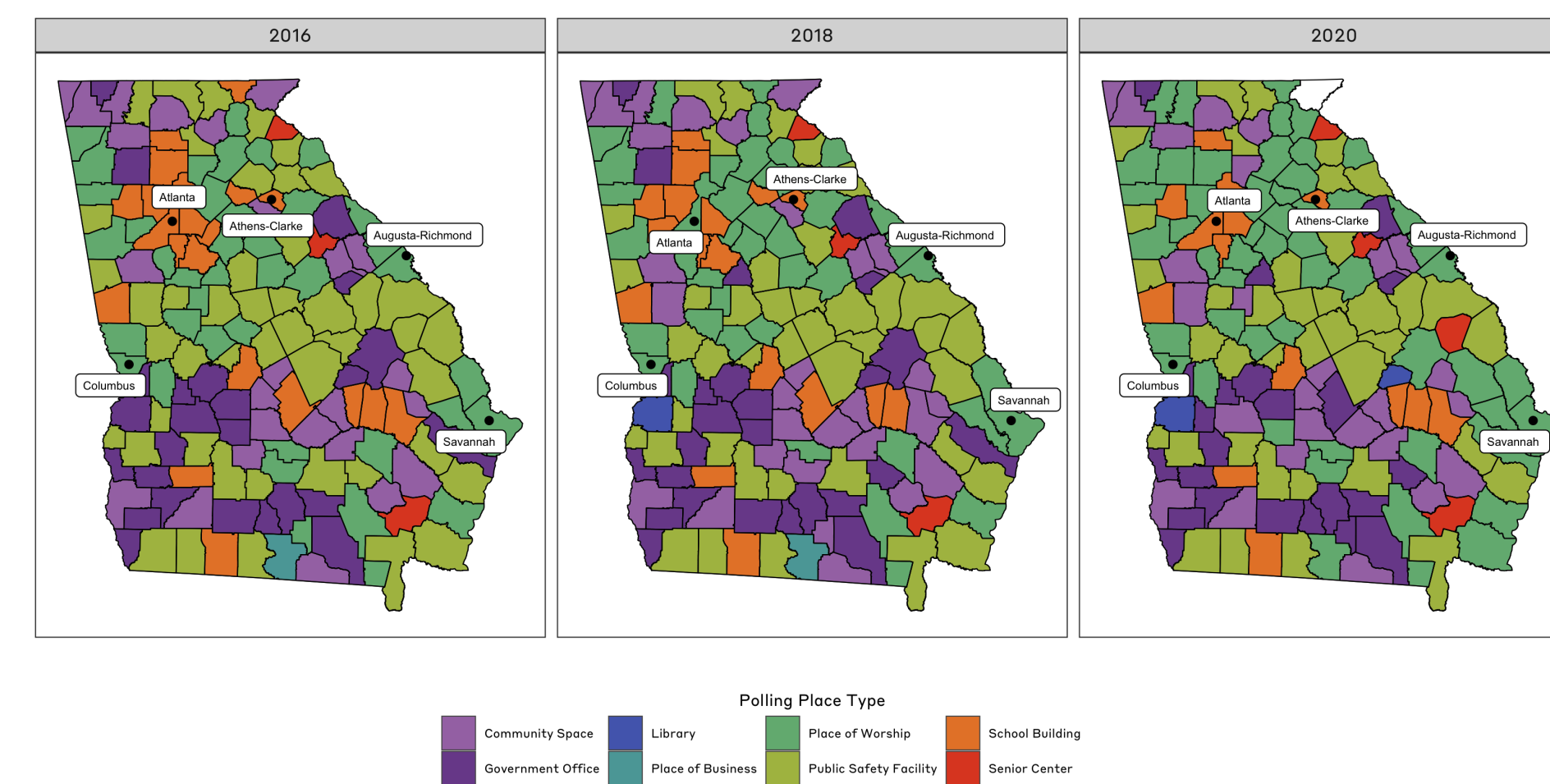


Figure 2. Modal Polling Place Facility Type by County

## Changing Places

Following previous work (e.g., Brady and McNulty 2011), my analysis begins with 2,889,861 voters who were registered and lived in the same address in 2016 and 2020. Of these voters, 720,474 were assigned to new polling place locations between the two elections. Of those voters whose polling place facility type could be identified, 74% were assigned to new facility types.

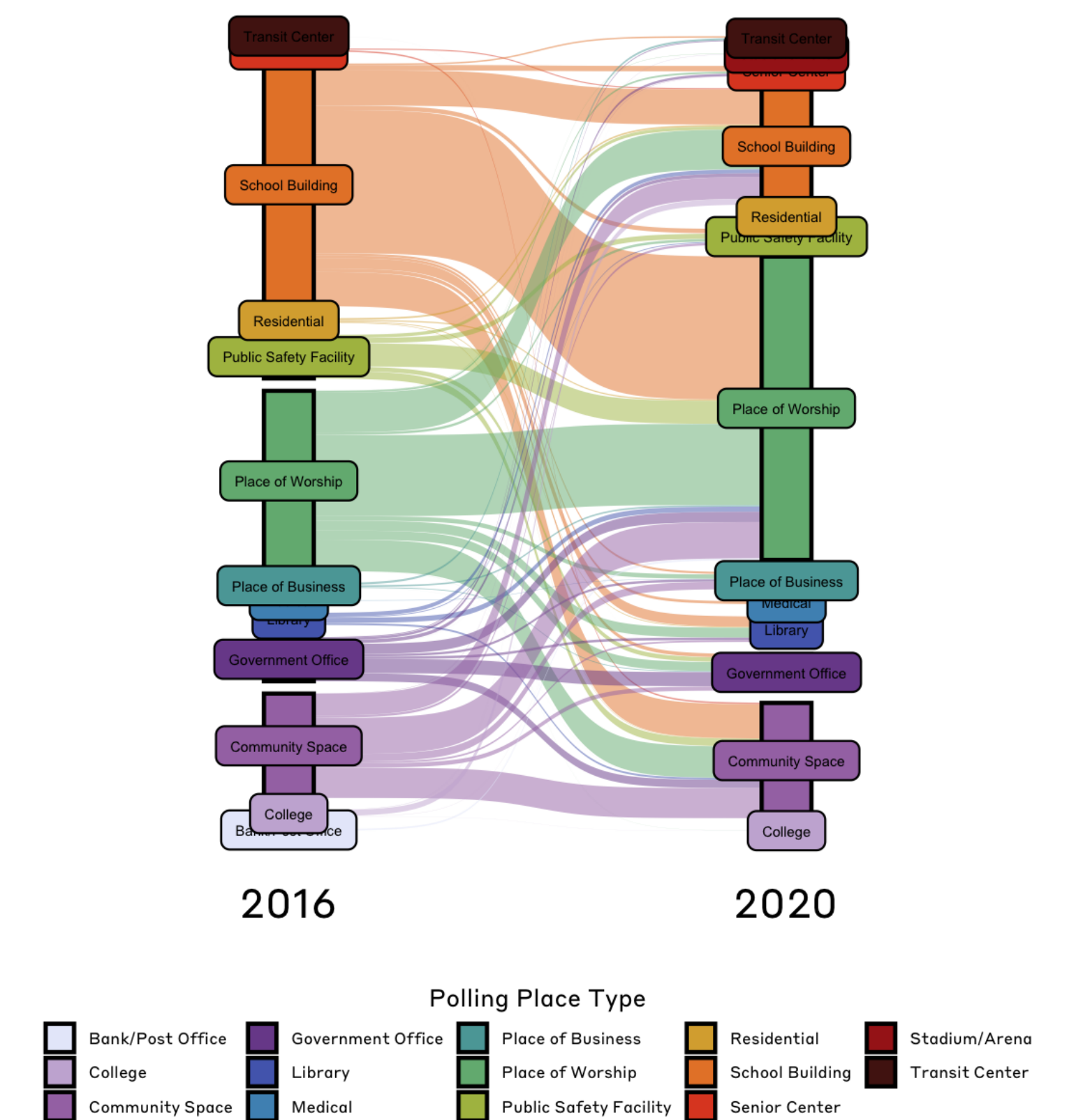


Figure 3. Polling Place Reassignment by Facility Type

Using a set of a two-way fixed effects models with exact matching on voter characteristics and history, I examine the average treatment effect on the treated (ATT) of both assigning voters to new locations (**Treatment**) and assigning voters to different facility types on turnout and use of absentee voting.

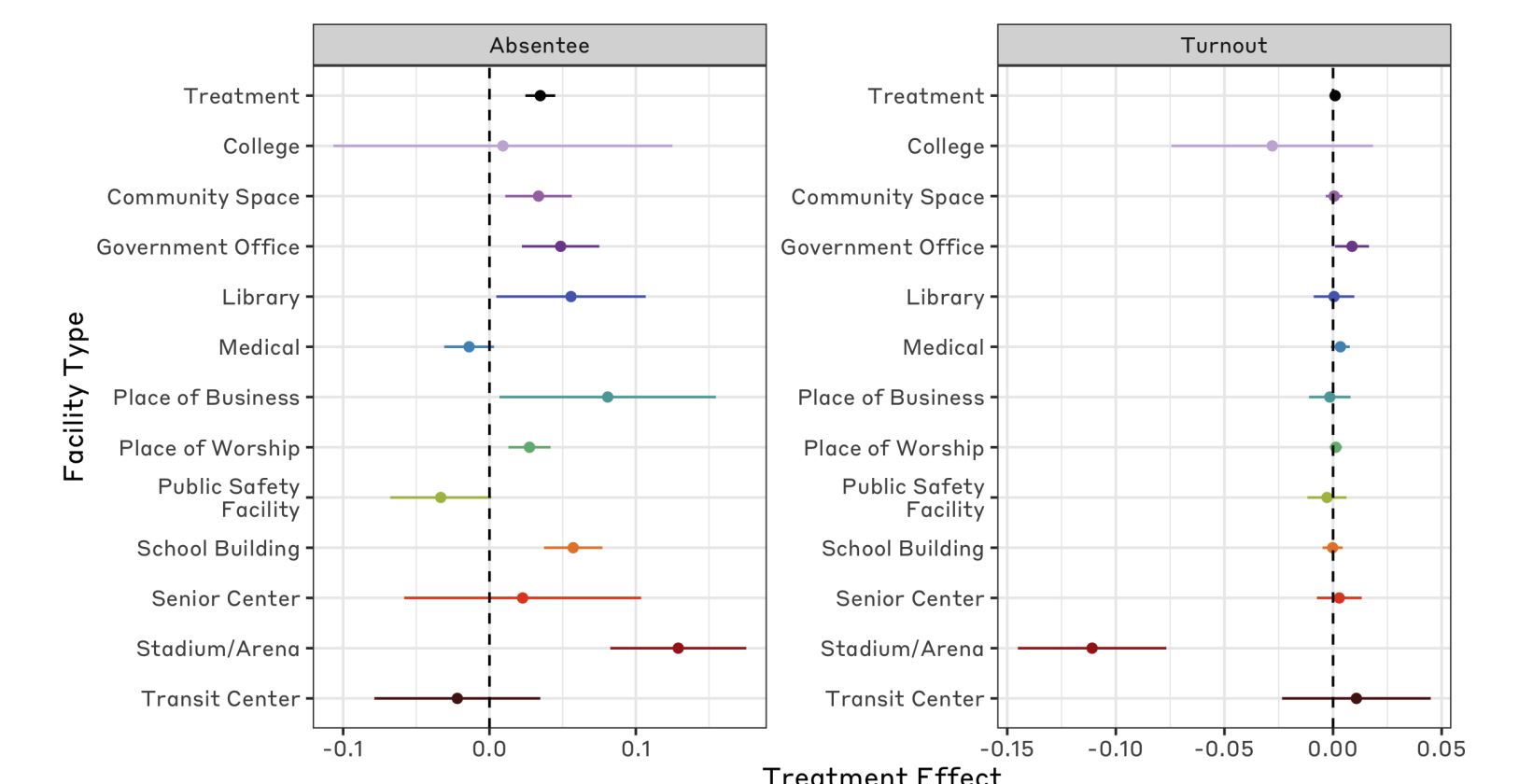


Figure 4. ATT of Polling Place Location Change (by Facility Type)