# **Intergovernmental Alignment, Program Effectiveness, and U.S. Homelessness Policy**

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#### **ABSTRACT**

In the U.S. intergovernmental system, state governments can voluntarily and strategically align with federal government strategies and objectives. This study examines the effect of intergovernmental alignment on federal homelessness program outcomes. In 2010, the U.S. Interagency Council on Homelessness started the first national level comprehensive strategic plan on homelessness: Opening Doors. The Opening Doors plan highlights intergovernmental partnerships as effective tools to implement federal homeless programs to different levels of governments in order to achieve federal outcomes. Using a Difference-in-Differences methodology, we find that county governments that align their homelessness program with the federal and state government have better program outcomes than those county governments that do not align intergovernmentally. Our findings help to expand our understanding of intergovernmental mechanisms as effective policy tools to achieve federal program outcomes at the local level in the absence of financial inducements or legal mandates.

How and why can federal programs in the U.S. lead to successful outcomes in local governments? What is the explanation for such intergovernmental program success? If success is not achieved, why not? Answers to these venerable questions dot the landscape of intergovernmental public administration research (Bickers and Stein 2004; Caruson and MacManus 2008; Lubell, Feiock, and Ramirez 2005; McCann et al. 2015; Radin 2006). Multiple levels of governments sometimes work together, sometimes not, but there is little doubt that subnational governments sometimes make strategic decisions regarding whether to engage in federal programs collaboratively or reject the guiding policy and remain on the sidelines (Agranoff and McGuire 2003). Often, subnational governments need the resources provided by the federal government and will take part in implementing the federal program to achieve effective program outcomes that, in practice, cannot be achieved by single government agency activities. Indeed, managing intergovernmental programs collaboratively can be routine and, in many cases, required activity in subnational jurisdictions of all sizes.

Intergovernmental collaboration arises first and foremost because agencies at all levels of government typically need each other to successfully carry out administrative functions and achieve policy goals. Federal governments need state (and local) governments not only as active service providers, but also as experts on the local impacts of social problems. At the same time, state (and local) governments have few reasons to avoid federal programs, if the programs can benefit their own governmental activities and not incur greater costs to the subnational government. As multiple governments are looking for "solutions designed to solve problems that go beyond one organization" (Agranoff and Radin 2015, 153), each level of government may choose to align strategically with another in order to achieve widely espoused policy goals.

The act of aligning administrative processes or decisions across levels of government, or what we refer to as "intergovernmental alignment," is not an idea that is non-controversial (see, Agranoff and McGuire 2001; O'Toole 1988). When different levels of government, particularly the federal and state governments, are allied in the alleviation of a particular social ill, a range of outcomes can occur. Some scholars argue that the response of states to federal programs is often one of adopting, adapting, or opting out (Hale and Brown 2013). Clearly, subnational agencies can align their intergovernmental processes through wholesale adoption of, or collaborative adaptation to, the program in question.

In this study, we focus on the important case of vertical intergovernmental alignment where state governments have responded to federal programs or policies, and, in turn, how federal-state alignment affects local outcomes. The main purpose of this study is to examine the incidence and impacts of intergovernmental alignment as a policy implementation tool to produce successful program outcomes (O'Toole 2000). The research reported here enables us to understand how vertical intergovernmental alignment between federal and regional levels can achieve federal program outcomes at the local (county) level in the absence of financial inducements or legal mandates. Thus, our general research question is as follows:

How does intergovernmental alignment with federal programs affect program outcomes at the local level?

#### HOMELESSNESS POLICY

We study homelessness to examine the effects of intergovernmental alignment in addressing a difficult social problem. Previous studies demonstrate that the prevalence of homeless

individuals is related to various socioeconomic and housing conditions (Culhane and Kuhn 1998; Early 2004; Kuhn and Culhane 1998; Orwin, Scott, and Arieira 2003). Additionally, homeless individuals face health, education, and drug-related issues that have potentially enormous social costs for society (Mansur et al. 2002; Quigley and Raphael 2001; Quigley, Raphael, and Smolensky 2001). These findings support the argument that homelessness is one of many social problems that have multiple antecedents and consequences from/to other social issues that single governments cannot adequately address.

As one means to address this problem in the U.S., the Obama Administration and Congress agreed in 2009 to design the first federal level, comprehensive strategic plan to end homelessness. The U.S. Interagency Council on Homelessness (USICH) was the lead actor for developing and implementing the plan. In 2010, USICH developed the strategic plan through intergovernmental collaboration and effort, thus highlighting the necessary partnerships with state and local governments to implement federal homelessness policy goals and program objectives. In order to collaborate with state and local governments to address homelessness, USICH highly recommends that a state government develop a state interagency council (SIC) on homelessness, which follows the objectives and structures of USICH (USICH 2016). Thus, creating SICs is a strategic and voluntary choice of state governments to align with a federal agency.

The cross-agency implementation mechanisms of USICH and its recommendation for state governments to create SICs enable us to analyze the federal strategic planning partnership and measure the degree to which the SICs align with the federal government. To address this issue, we gathered county level chronic homelessness data within the U.S. between 2009 and 2012. We compare program outcomes (chronically homeless individuals per 100,000 population

in a county) of the federal plan between counties where intergovernmental alignment exists and counties where intergovernmental alignment does not exist. A difference-in-differences method allows us to examine the effect of intergovernmental alignment on local homelessness outcomes.

In the next section, we provide a brief look at intergovernmental research within the public administration context and highlight the importance of intergovernmental alignment in public policy and program evaluation. We then introduce the federal homelessness agency (USICH) and its intergovernmental mechanisms to implement the federal plan (Opening Doors). Next, we explain the dataset and methodology, and then discuss the results. The final section summarizes and explains the implications of findings.

# UNDERSTANDING INTERGOVERNMENTAL ALIGNMENT

Although intergovernmental relationships are formed through different combinations of governments, the preponderance of recent intergovernmental research focuses on vertical relationships based either in federal funding or mandates to state and local governments (Carley, Nicholson-Crotty, and Fisher 2015; Hall and Handley 2011; Goerdel 2013; Nicholson-Crotty 2012; Nicholson-Crotty and Nicholson-Crotty 2015; Terman and Feiock 2015a & 2015b). This research enables us to understand how intergovernmental relationships exist in terms of the funding distribution process and/or the enforcement of program mandates, particularly focusing on political and/or administrative conditions between federal and state/local governments. However, many intergovernmental programs are not based in the provision of financial support or legal mandates. State governments are relatively free to choose strategically whether to align with the federal government. Further, state and local governments may exercise greater roles as

service providers in public program implementation in the absence of intergovernmental requirements to receive federal funding or follow federal mandates.

The motivations for such alignment vary as well. For example, consider a policy area such as public, K-12 education. The federal program No Child Left Behind was a federal policy adopted in 2001 that "aligned" the policy goal of a better-educated society across the federal and state governments (and local governments in its implementation). However, many states argued that the alignment was coerced, mandated, and did not take the unique characteristics of a state and its localities into account (Krane and Koenig 2005; National Conference of State Legislatures 2005). What was an intended intergovernmental alignment instead resulted in multiple efforts at resistance by many different states (Dinan and Krane 2006).

Some federal programs, such as the move to electronic voting equipment in states, are considered voluntary so that alignment is a strategic decision by a state, and not a coerced one; the state simply may not participate. In addition, the implementation of various policies has been plagued by "partisanship, pushback, and uncertainty" (Bowling and Pickerell 2013), resulting in a "fragmented federalism" rather than one that is aligned. Scholars have also bemoaned the apparent opportunism that pervades American federalism (Conlan 2006; McGuire 2006), leaving state governments with little choice but to align or dissent. Aligning levels of government in a federal system is thus not always appropriate, workable, or acceptable to state governments. Indeed, any attempt to attain intergovernmental alignment may be antithetical to American federalism in that uniformity is not necessarily the aim of a federal system (Wildavsky 1984).

On the other hand, state governments can and do make strategic choices to align with federal goals and/or policy implementation processes. States may develop policies in response to federal guidelines, as in the case of education waivers or health insurance/Medicaid (Radin

2006). We cannot say states directly align with the federal government on implementing the associated programs. Often, "these policies are created in response to a perceived need to which the federal government has failed to respond, even though it may be a 'national interest'" (Bowling and Pickerill 2013, 23). Clearly, the ability of states to share policy goals and respond accordingly on behalf of the jurisdiction is consistent with federal principles and practice (Agranoff and McGuire 1998b & 2003).

When is intergovernmental alignment a proper strategy to adopt? The answer is not obvious. The scope and extent of intergovernmental alignment, especially when not coerced or mandated by federal government, are based on the strategic decisions of state and local governments of whether or not to align. Federal government agencies often cannot achieve their goals and objectives without the support of other levels of governments; state and local governments may have less incentive to follow the objectives of federal governments without proper financial inducements or legal mandates. In the absence of financial rewards and/or legal mandates, intergovernmental alignment can occur when state or local governments strategically or voluntarily adopt/adapt federal government recommendations to solve a social problem.

Sometimes, state or local governments can adopt (or adapt) a federal program to create "intergovernmental alignment." The concept of intergovernmental alignment used in this study describes an alternative policy mechanism that may (or may not) lead to effective federal program outcomes at the local level, based on the strategic choices of state governments to take part in a federal program. The federal government needs state and/or local governments to achieve national policy goals. Additionally, state governments become active partners in the intergovernmental context when they perceive that such partnerships benefit their own policies and programs (Agranoff and McGuire 2003; Krane 2007). Intergovernmental alignment is often

the result of strategically created, interdependent relationships among different levels of governments. Intergovernmental alignment can be an effective policy implementation tool for the federal government to achieve its policy goals. We thus test the following general hypothesis:

Hypothesis: Intergovernmental alignment between federal and state governments results in better local program outcomes than when federal and state governments are not aligned, all other factors being equal.

# THE U.S. INTERAGENCY COUNCIL ON HOMELESSNESS AND OPENING DOORS The U.S. Interagency Council on Homelessness

In order to understand the important role of intergovernmental alignment, we examine the U.S. Interagency Council on Homelessness (USICH), which is a federal-level independent agency that collaborates with 19 federal departments and agencies to reduce and prevent homelessness, and a national level homelessness program (Opening Doors), which is the comprehensive strategic plan to end homelessness that was authorized in 2010.

The federal government developed USICH in 1987, becoming the major federal entity to initiate and lead federal level homelessness programs. It is charged with coordinating active partnerships across different levels of governments and types of organizations. Under the Homeless Assistance and Rapid Transition to Housing (HEARTH) Act in 2009, the USICH highlighted that its main mission was to:

...coordinate the Federal response to homelessness and to create a national partnership at every level of government and with the private sector to reduce and

end homelessness in the nation while maximizing the effectiveness of the federal government in contributing to the end of homelessness. (Homeless Assistance and Rapid Transition to Housing Act of 2009, 35)

The USICH develops interagency partnerships that involve every level of government and different types of organizations. The USICH encourages state governments to create a state interagency council (SIC) on homelessness as a means to effectively coordinate across all levels of government. The objective of creating SICs is to align the functions of the USICH within all statewide areas and to communicate with multiple stakeholders, including all three levels of governments and nongovernmental organizations, in order to develop and implement statewide homelessness programs that are aligned with the Opening Doors program. In order to collaborate with the federal agency (USICH), state governments strategically adopt federal recommendations to develop SICs. Additionally, SICs provide forums in which other state or local stakeholders can participate into the development and implementation of statewide homelessness programs (USICH 2011). Overall, the SIC is a statewide, intergovernmental planning body that involves federal, state, and local governments, as well as nongovernmental organizations, to align (and adopt) goals, strategies, and programs of federal agency (USICH) in order to develop performance-based partnerships to end homelessness within its geographic region (USICH 2016). Because of this intergovernmental structure, local governments within states that have active SICs expect to receive benefits of intergovernmental alignment both between federal and state levels as well as among inter-local relationships within state governments. The development of an SIC is entirely a state governmental decision. Once state governments develop SICs, they are directly connected with USICH so that county and other

local representatives can participate in the development and implementation of statewide homelessness programs as members of SICs (USICH 2011). State governments create SICs based on executive orders of governors or legislative action; however, "the most common vehicle of creation is the executive order which identifies membership, meeting frequency, functions, and timeframe" (USICH 2011, 2).

The USICH recommends forming council members of SICs that includes a wide range of stakeholders, such as Governor's representatives, state agency representatives, local federal officials, local agency representatives, nonprofit advocates, for-profit businessmen, religious and community leaders, and current or previous homelessness individuals. Throughout the partnership with SICs, the USICH is able to create intergovernmental cooperation involving local community leaders from county and city governments (USICH 2011). Without financial incentives or legal mandates, county governments receive administrative, managerial support from both federal-state and inter-local relations to address homelessness. Specifically, this kind of intergovernmental alignment can play a critical role as a direct strategic and implementation pipeline in order to measure the federal program's goals and strategies for local governments compared with those local governments within state governments without SICs. This process is voluntarily and strategically decided by state governments to align (adopt or adapt) with a federal agency's recommended policy tool.

# Opening Doors

This study examines the impact of intergovernmental alignment on local level program outcomes by examining the first national level comprehensive strategic plan to end homelessness (i.e., Opening Doors) developed and managed by the USICH. State governments build SICs in order

to align with the USICH. In this case, any policy implemented by the USICH would have different impacts at the local level that vary according to the existence and degree of intergovernmental alignment. The USICH initiated various efforts to develop a comprehensive national level homelessness program. First, the USICH arranged five federal level workgroups to focus on different types of homelessness, including chronic, veterans, families, youth, and community homelessness. Each of the five groups collaborated with practitioners and researchers to emphasize strategies and goals to address each type of homelessness (USICH 2010). Second, the USICH facilitated a number of meetings with state and local governments in order to collect information and create active partnerships with state and local governments for implementing Opening Doors. The USICH understood the importance of multi-actor efforts to address homelessness and opened strategic planning meetings to all governmental actors, nongovernmental actors, and homelessness advocates, as well as individuals who had experienced homelessness. Overall, the development and the implementation of Opening Doors rely heavily on intergovernmental collaboration among different levels of governments and types of organizations.

Because of these efforts, the USICH published Opening Doors in 2010, which explicitly identifies its goals and timeline, such as ending chronic homelessness within five years; ending veteran homelessness within five years; ending homelessness for families, youth, and children within ten years; and setting a path toward ending all types of homelessness. Additionally, the Opening Doors plan offers several strategies to secure stable housing, economic, and health systems to various types of individuals (USICH 2010). The plan was updated twice, in 2012 and 2013, and amended twice, in 2012 and 2015. The last amendment points out additional strategies to end homelessness after learning from five years' experience of implementing homelessness

policy; however, its initial goals and strategies have remained the same in updated and amended versions: ending all types of homelessness within ten years and developing systematic structures including those with a focus on economic, health, and educational issues.

Although the objective of Opening Doors is to implement a nationwide homelessness program, its implementation process will vary by local areas as state governments are not uniformly aligned with the USICH. In order to effectively transfer the goals and strategies of Opening Doors to local areas, the implementation process may be dependent on the structure of USICH as the USICH uses SICs to facilitate intergovernmental partnerships (USICH 2010). Local governments within the state that have a SIC might receive the "benefits" of the plan, while local governments within the state that do not have the SIC might achieve different outcomes. The different outcomes between two different local governments could be explained in terms of the existence of intergovernmental alignment.

#### DATA AND METHOD

Data

The unit of analysis is county government observed from 2009 until 2012, and the main objective of our empirical model is to examine the effect of intergovernmental alignment between federal and state levels on federal program outcomes at county level. To test the key hypothesis, we developed a panel dataset from multiple sources. By using the panel dataset, in particular, we are able to compare average changes in outcome variables over time in between units who decided to take up the treatment effect (intergovernmental alignment) and those who decided not to take up the treatment effect (not align) (Morgan and Winship 2007). We used homelessness data provided by the U.S. Department of Housing and Urban Development

(HUD). This data source comes from the annual reports of homelessness collected by Continuum of Care (CoC) programs. This data source provides the number of the homeless population at the county level and the amount of federal homeless financial grants to a county government, and is widely used in homelessness research (see Byrne et al. 2013).

Our data collection was based on the somewhat limiting conditions of this data source. Two-hundred and eight county governments are chosen by HUD to provide homeless-related information at the single county geographic area. This is a subset of the 402 CoCs in the entire U.S. in 2012. Thus, the 208 county governments used in this study come from the 208 CoCs that are contiguous with single county borders. These 208 county governments have been chosen by HUD to locate certain CoCs at the single county area since these are mostly urban county areas and have relatively greater homeless issues than other geographic areas in states (HUD 2009). For example, the average total homeless population in the U.S. between 2009 and 2012 was approximately 587,000. Nearly 300,000 homeless individuals are located in the 208 counties used in this study, which means that more than half of the total homeless population in the U.S. are captured in this study. Additionally, 208 counties are mostly located in urban areas and include about 31% of total population, based on 2012 U.S. population size. Thus, although 208 counties is less than 10 percent of total county size, we argue that we collected a representative sample dataset that embodies the total homeless population in the U.S. region. Second, previous studies on homelessness found that the incidence and consequences of homelessness are related to regional socioeconomic characteristics (Early 2004; Orwin et al. 2003). In order to examine the central hypothesis that intergovernmental alignment affects local outcomes, it is incumbent upon us to find ways to control for such regional characteristics that may provide an alternative explanation of the results of our empirical models. Using county as a unit of analysis enables us

to include a series of covariates that captures various regional characteristics at the county-level in order to improve the accuracy of our empirical results. Last, the USICH states that homelessness is a local issue and highlights the important role of local entities to reduce the homeless populations (USICH 2010). Thus, due to both methodological and practical reasons, the county government is an essential unit of analysis to examine the effect of intergovernmental alignment in U.S. homelessness policy.

In addition to the annual reports of homelessness, we identified SICs and collected each strategic plan on homelessness that state and county governments produced from the information that USICH provides. In order to develop a reliable dataset, we also visited each state governmental website to check whether the SIC is made by an active executive order or legislative action that USICH recommends. Further, we investigated each state and county government website to discern whether they have separate plans developed by their own efforts rather than Opening Doors. We also collected U.S. Census data (using the American Community Survey) on county-specific socioeconomic and housing characteristics that previous studies have identified as key determinants of homelessness. These include data on median household income, non-white population rate, unemployment rate, poverty rate, and median house value, all measured at the county level. Last, we collected political characteristics of state and county governments, by employing two political control variables: (1) the percentage of the vote in a presidential election that was for the Democratic Party candidate at the county level, and (2) the existence of Democratic Party alignment between President and Governors at the state level. Overall, the dataset consists of 208 county governments located across thirty-three states over four years from 2009 to 2012. Because of some missing data from outcome variables due to

incomplete reporting by the CoCs, the total number of observations is 783 from 208 county governments. Table 1 shows the distribution of county governments.

#### Insert Table 1 about here

All counties used in this study are properly distributed across four large geographic regions in the U.S.: Northeast Region (fifty-three counties); South Region (fifty-seven counties); Midwest Region (fifty-one counties); West Region (forty-seven counties). Regional characteristics can be important determinants of the homeless population, as some geographical pockets of the U.S. population experience higher incidences of homelessness. In addition, the distribution of state and county governments is an important foundation for conducting the empirical model in this study, as we compare the program outcomes between two groups: one group that has a SIC in the state and another group that does not have a SIC in the state. Table 1 shows that the dataset includes thirty counties in California and seven states have only one county government in the dataset (Alabama, Colorado, Idaho, Indiana, Iowa, New Hampshire, and Vermont). All other states have two to seventeen county governments in the dataset. As our empirical strategy is to compare average changes in outcome variables over time between two groups who have a SIC and those that do not, our concern was to check if any single regional characteristics outpaced other regions. According to Table 1, all sample county governments are well balanced in the four large geographic regions.

Additionally, comparing average changes in outcome variables between two groups before and after Opening Doors (i.e., the homelessness program intervention) is a main area of research in this study, we developed both treatment (i.e., counties within a state that have a SIC)

and comparison (i.e., counties within a state that do not have a SIC) groups. As shown in Table 2, not all states have uniformly activated or deactivated SICs so that intergovernmental alignment does not occur at the same time-period. Although Opening Doors started in 2010, the effect of intergovernmental alignment on local (county) chronic homeless populations occurs in different time-periods due to the strategic decisions by states. According to the information we collected, twenty-one states have active SICs and five states do not have them, regardless of the timeperiod; however, seven states activated SICs during the time-period of 2009-2012: Arizona, North Carolina, New Jersey, Nevada, Tennessee, Vermont, and Virginia. Arizona, North Carolina, and Virginia started to have active SICs in 2010 so all counties in these three states have been categorized as in the treatment group; however, Tennessee decided to deactivate SICs in 2010 so all counties in Tennessee have been classified as the comparison group. New Jersey and Vermont developed active SICs in 2012 so counties in New Jersey and Vermont are classified as the treatment group in later years than other counties. Table 2 displays the variation of SICs between 2009 and 2012 in state governments. Overall, 124 county governments are counted as the treatment group, and eighty-four county governments are counted as the comparison group.

#### Insert Table 2 about here

The program intervention is the Opening Doors plan in 2010. Considering the nature of intergovernmental partnering between the federal (USICH) and state governments (SICs), this empirical strategy enables us to examine the effects of vertical intergovernmental alignment on federal program outcomes at the local (county) level, as the difference between two groups is

based in whether the states and their localities are intergovernmentally aligned with USICH (or not).

#### Measurement

Outcome Variable. The outcome variable is the number of chronic homeless persons per 100,000 population in a year for a county, collected from HUD's annual homeless reports. As ending the chronic homelessness populations is one of the major goals listed in the Opening Doors program, the size of chronically homeless populations in a county in a given year is an appropriate measurement to examine the effect of intergovernmental alignment at the local (county) level. HUD publishes annual reports that contain the total number of homeless persons counted in a single night in January by CoC. HUD utilizes a systematic data collection of the homelessness population and offers a large sized and reliable homelessness dataset that accounts for local specific conditions (Byrne et al. 2013). We examine persons continuously experiencing homelessness for more than one year (i.e., chronic homeless individuals) that covers only the single county areas. The measure of chronic homeless persons is used as the dependent variable since ameliorating chronic homelessness is asserted as the main goal of Opening Doors. In order to demonstrate the robustness of our empirical evidence to support the treatment effect, we include one additional outcome variable, which is the number of permanent beds per 100,000 population in a year for a county, also collected from HUD's annual homeless reports. Another main goal listed in Opening Doors is to provide more permanent, long-term housing properties to homeless individuals. We expected that the treatment effect would be also significantly related with this outcome variable, which bolsters the treatment effect of intergovernmental alignment strategy on local homelessness program outcomes.

Key Independent Variables. The treatment effect is an interaction term (Opening Doors \* SIC). We code the Opening Doors variable as a time variable that is measured as a "1" when the USICH started the Opening Doors program and "0" before it was created (i.e., Pre- and Postperiods). The SIC is a treated variable that is coded as a "1" when a county government is located in a state that has a SIC and "0" when a county government is located in a state that does not have a SIC (i.e., treated and non-treated). Thus, the interaction term is equal to "1" when a county government is vertically aligned between federal and state governments, which signifies that counties are located in states where intergovernmental alignment exists and when the Opening Doors program began. The value of the variable is "0" when counties are not vertically aligned, which means that counties are located in a state without intergovernmental alignment and/or before the Opening Doors program starts. Under this condition, we can argue that the difference in the number of chronic homeless persons between the two groups is due, in part and when all other factors are held constant, to vertical intergovernmental alignment.

Covariate Variables. We employed a list of covariate variables to control for an endogeneity bias that may affect the existence of intergovernmental alignment on program outcomes. All covariate variables are collected by county level for four-year period from 2009 until 2012. We based our selection of covariate variables on previous research on intergovernmental and homelessness research. First, we included figures representing intergovernmental homelessness grants per capita that are available from the federal government in order to control for other possible explanations of intergovernmental processes other than alignment. Second, we included both states' and counties' strategic plans to account for non-monetary intergovernmental efforts

between the federal and state levels. Third, we included a series of county-specific characteristics that capture time-varying socioeconomic, housing, and political characteristics in a year for a county. We employed median household income, non-white population rate, unemployment rate, poverty rate, and median house value as covariate variables. As governmental programs and efforts on social issues can be affected by political conditions and stances, we included the level of Democratic Party vote in a presidential election and alignment between the President and the Governor's party affiliation. Last, we used county and year dummies to control the time-invariant observed and unobserved characteristics that affect homelessness conditions and program impacts at the county level, as well as the trend of homelessness across time to control for any unexpected national level economic and social crises that occurred between 2009 and 2012. We describe all variables in Table 3.

#### Insert Table 3 about here

#### Method

We use the difference-in-differences method (DID) for determining the effect of intergovernmental alignment on program outcomes. DID is an appropriate method when research aims to compare average changes in outcomes at the group level when one group has received the treatment effect while another group has not. Group difference in outcomes before and after the program intervention enables us to assess causality from the average treatment effect at the group level (Angrist and Pischke 2008, 227). What we expect from using the DID approach is to estimate whether the federal program has shown varying results at the local (county) level by comparing the outcomes between two groups who have (and do not have) intergovernmental

alignment. We estimate the first-difference in the outcome of the treatment group between the pre-treatment (2009) and the post-treatment (2010-2012) periods. After that, we employ the second-difference in the outcome of the comparison group between pre-treatment (2009) and the post-treatment (2010-2012) in order to control for the common trend of outcomes in the absence of intergovernmental alignment. The second-difference in the outcome provides the average changes in chronic homeless populations between 2009 and 2012 within counties that did not have the benefits of intergovernmental alignment. Thus, we are able to estimate the effect of intergovernmental alignment on chronic homeless persons by comparing one group of counties that have aligned intergovernmentally with another group of counties that are not aligned across governments. As the treatment group is the only group that is intergovernmentally and strategically aligned between federal and state governments, the DID approach enables us to examine the impact of intergovernmental alignment on program outcomes where the homelessness program occurs in the right place (within the SIC) at the right time (after the Opening Doors).

Researchers who study governments and management of governments have recently used this method. For example, Wang, Zheng, and Zhao (2012) used the DID method to study fiscal reform of county governments in China in order to determine whether reform leads to more responsible local governmental activities in education. Van Ryzin (2014) studied the difference between public and private sector employees after the 9/11 in the U.S. Additionally, Rubin and Weinberg (2016) studied the changes in federal employees' perceptions on procedural justice after civil service reforms in the Department of Defense. Accordingly, the DID method helps us to estimate the treatment effect when researchers can plausibly argue that two groups differ only by the program/policy intervention, which means that two groups would have a similar trend-line

in the absence of the treatment (the common trend assumption).

In order to assess the common trend assumption, we must provide evidence that both the treatment and comparison groups follow the same trend in the absence of the program intervention. In this study, we used a Stata command, "DQD." The null hypothesis is that both treatment and comparison groups have common pre-treatment dynamics. Using a dataset of pretreatment periods from 2005 to 2009, we employed the Wald test of the joint significance of the entire pre-treatment period to test the common trend assumption (Mora and Reggio 2015). In order to increase the accuracy of our test result of the common trend assumption, we include all other covariates used in the empirical model into the test. The Wald test supports the argument that both treatment and comparison groups have followed pre-treatment dynamics, after controlling covariate variables. As we failed to reject the null hypothesis at p-value 0.11 level, we have enough evidence to support the common trend assumption. This Wald test result confirms that the modeling approach does not violate the common trend assumption. We additionally checked whether any socioeconomic, housing, and political characteristics between the two groups have changed dramatically between pre- and post-treatment. If so, this would suggest that changes in chronic homelessness outcomes or permanent bed outcomes might be due to these characteristics. However, Table 4 shows that changes in the covariate variables between treatment and comparison groups are mostly constant over the pre-treatment and posttreatment periods. Only unemployment rate and political party alignment have significantly changed over the pre-treatment and post-treatment periods; these variables, including other covariates, are controlled in our final empirical model. Overall, these approaches strengthen the arguments about the empirical findings from the DID method.

#### Insert Table 4 about here

Using the DID method, we measure the treatment effect that varied only between treatment and comparison groups, which means that a plausible counterfactual group exists at the group level and the differences in outcomes between two groups should follow the same trend in the absence of the treatment (Morgan and Winship 2009). Thus, the counterfactual group in this study is the group of county governments that are not intergovernmentally aligned, and we expect that the differences in outcomes between treatment and comparison groups are constant in the absence of intergovernmental alignment. In addition, we included a list of county specific, time variant, covariate variables in order to control for other possible explanations of the differences in outcomes between treatment and comparison groups. As our empirical strategy is to compare counties by dividing two groups based on state governments' discretion to align (adopt) federal recommendation, it is important to consider any regional characteristics that could remain over time (or rarely changed over time) and intervene in the association between treatment and outcome variables. Adding county and year dummy variables with a list of countylevel time-varying characteristics helps us to improve the accuracy of our empirical evidence to support (or not support) the hypothesis. Thus, a final regression model is as follows:

$$\begin{aligned} Outcome_{it+1} &= B_0 + B_1 Post_{it} + B_2 Treated_{it} + B_3 (Post*Treated)_{it} + B_4 SP_{it} + B_5 CP_{it} + B_6 Grant_{it} + X\beta \\ &+ \rho_i + \tau_t + \epsilon \end{aligned}$$

where 'i' is a county and 't' is a year. 'Outcome' is the average number of chronically homeless persons per 100,000 population at the county level and the average number of

permanent beds per 100,000 population at the county level. As our intention is to examine the program effectiveness of intergovernmental alignment strategy, we use a lead outcome variable to see what happened after the program starts (t+1). 'Post' is a dummy variable in which "1" indicates the post-treatment period and "0" indicates the pre-treatment period. 'Treated' is a dummy variable in which "1" indicates that a state interagency council was in existence and "0" indicates that state interagency council did not exist. 'Post\*Treated' is an interaction effect, which is the treatment measurement, in which "1" indicates the treatment group in the posttreatment period and "0" indicates otherwise. 'SP' is a dummy variable in which "1" indicates that a state has its own strategic plan on homelessness and "0" indicates otherwise. 'CP' is a dummy variable in which "1" indicates that a county has its own strategic plan on homelessness and "0" indicates otherwise. 'Grant' is total amount in dollars of federal homelessness grants per capita awarded to a county in a year. 'X' indicates a vector of the county socioeconomic, housing, and political characteristics, such as median household income, non-white population rate, unemployment rate, poverty rate, median housing value, democratic vote, and gubernatorial party alignment. We use median household income, non-white population rate, unemployment rate, and poverty rate to capture socioeconomic characteristics within a county that varies over time. Median housing value is included as an indicator of housing characteristics within a county over time. The last part of county-specific, time varying characteristics captures political characteristics from democratic vote and democratic governor. 'ρ' indicates a county dummy. 'τ' indicates a year dummy. '\varepsilon' indicates the error terms. From this equation, our goal is to calculate and assess the significance level of B<sub>3</sub>, as well as its direction and size.

# **FINDINGS**

The DID result indicates the effect of intergovernmental alignment where the SIC exists when the Opening Doors started. The model results are listed in Table 5.

#### Insert Table 5 about here

Model 1 shows a basic DID model listed in the model equation. In order to bolster the robustness of our empirical finding, we provide additional tests. Model 2 includes one additional year in both pre- and post-treatment periods to examine whether the program impact is constant over time. Model 3 and Model 4 are tested to see whether the treatment effect exists when we include a different outcome variable (i.e., total permanent homeless beds per 100,000 population). All four models show significant results from the treatment effects. We are able to argue that there is enough evidence to support our hypothesis that intergovernmental alignment is a significant and effective way to reduce chronically homeless populations and provide more permanent housing properties to homelessness. Model 1 shows that the treatment effect is -7.38 (p: 0.007), when controlling for all other factors. Models 2 show that the treatment effect is -6.09 and is consistently significant at the 0.07 level. In order to reduce chronic homeless populations, the USICH highlighted the importance of providing permanent housing properties for the homeless. Both Model 3 and Model 4 show that county governments aligned with federal and state governments are likely to provide more permanent housing properties than county governments not aligned. Holding other factors constant, Model 3 (p: 0.011) and Model 4 (p: 0.011) are consistently significant at 0.05 level.

Considering the main treatment effect (i.e., chronic homelessness per 100,000 population) of our empirical model, our findings indicate that county governments aligned

strategically with the federal and state governments have on average 7.38 fewer homelessness per 100,000 population than county governments that do not have state governments that have aligned their homelessness program strategies with the USICH. Additionally, the program is consistently effective over a longer time-period. The average population size of county governments used in this study is 646,490. Considering this size, the federal homelessness program (i.e., Opening Doors) has a larger impact on the chronic homelessness population (approximately forty-seven fewer chronic homeless persons in average county population size) when county governments have direct, official intergovernmental alignment than in county governments not aligned in this way. Adding a series of covariate variables bolsters the robustness of our findings, as our intention was to reduce possible endogeneity bias. As a result, we have enough evidence to answer the research question and support our hypothesis that vertical intergovernmental alignment leads to effective federal program outcomes at the local (county) level. In order to add to the robustness of our statistical evidence, we additionally test whether or not the intergovernmental alignment has relatively stable impact on local permanent homeless housing over time. The treatment effects are still statistically significant when timeframe is both 2009-2012 (coefficient: 9.88, p: 0.011) and 2008-2013 (coefficient: 12.93, p: 0.011). Thus, we can argue that intergovernmental alignment in the absence of incentives or mandates does provide effective program outcomes in federal homelessness programs at the local (county) level.

#### DISCUSSION

In this study, we examined whether state governments' voluntary, strategic decisions to follow a federal government recommendation (i.e., intergovernmentally align) lead to better program

outcomes. The county-level chronic homeless population is used as the outcome variable, as the chronically homeless population is the most urgent and highest priority noted in the Opening Doors program. We employed the Difference-in-Differences method to examine the average difference in chronic homeless numbers between treatment and comparison groups in order to control for the average trend of county level chronic homelessness numbers without intergovernmental alignment. After adding a series of covariate variables, our findings consistently support the argument that intergovernmental alignment leads to greater program effects in this federal homelessness program. However, our empirical findings must be interpreted cautiously as we do not estimate the causal treatment effect of the Opening Doors. Hence, we adopt the DID approach in order to compare the differences in program outcomes between two groups in order to examine the impact of intergovernmental alignment. Thus, the treatment effect from our approach only enables us to understand the effect of intergovernmental alignment by group differences rather than the federal program effect itself. Further, as county governments are not naturally divided into two groups, the division between treatment and comparison groups in this study is based on the strategic and voluntary action made by state governments. Since the two groups are not divided naturally, one cannot expect to address causality from our empirical findings. However, we are able to show that our empirical strategy using the DID approach is able to provide highly reliable associations between the intergovernmental alignment and homelessness program outcomes.

In the American governmental system, political consensus at the federal level is an important factor for achieving meaningful national level results (see, Bakvis and Brown 2010). In the case of our study, both the president and the Congress supported the federal homelessness program in 2009. Although Opening Doors has achieved political consensus at the federal level,

its impact at the national level may be weakened by the lack of financial incentives or coercion. As mandated cooperation is a common component in the intergovernmental system (Caruson and MacManus 2006), state and local governments may have less desire to follow federal programs that do not have any financial incentives or mandates. However, we have observed some variations within state governments that made strategic decisions to align with the federal government. Strategic and voluntary decisions of state governments lead to effective program (homelessness) outcomes at the local (county) level.

We assert that this study makes two contributions. First, we are able to expand the concept of intergovernmental alignment as an effective implementation process to achieve federal program outcomes at the local (county) level in the absence of financial incentives or mandates. In an era of multi-governmental arrangements, intergovernmental strategic alignment is a useful phenomenon to study. Vertical arrangements in the intergovernmental system are present in the real world and play important roles in the management of governmental activities at the local level. The findings complement past research on the vertical intergovernmental system and the implications of intergovernmental relations on local governments. Second, we attempted to control for possible endogeneity bias in order to improve the quality of our empirical findings. Given the complexity of the homelessness issue, researchers should account for as many alternative explanations as possible, such as county specific characteristics or other governmental efforts. The DID method enabled us to control for many possible sources of endogeneity bias that may mediate the effect of intergovernmental alignment.

Besides these two contributions of findings, we expect that this research extends the research conversation to include strategic behaviors and activities inside the U.S. intergovernmental system. In this study, we focused particularly on intergovernmental relations

and its impact on federal program effectiveness. We are unable to view the roles of managerial activities inside intergovernmental alignment. Findings from this study provide empirical evidence to support the structural aspects of intergovernmental alignment that lead to effective federal program outcomes at the local level, but management behaviors are not accounted for. It will be more robust to understand the bigger picture of the effect of intergovernmental arrangements on public policy or program outcomes when we combine both structural and behavioral impacts. Additionally, our findings should be interpreted with caution as we only use the homelessness program from 208 counties in the U.S. We cannot be sure whether one could find the same results in different policy settings. Thus, future research might possess a larger sample size and adopt the concept of intergovernmental alignment in different policy settings to replicate and extend the findings.

# **CONCLUSION**

Homelessness is a serious problem that is difficult to alleviate in the U.S. There have been several federal policy efforts to deal with homelessness. The Opening Doors program is the first-ever comprehensive homelessness program developed by the federal government to provide not just housing properties, but also economic, social, and health services to homelessness persons. Additionally, this program is an outcome-driven program that highlights intergovernmental, collaborative partnerships across boundaries. The empirical evidence of this study supports the notion that the Opening Doors program is effective at reducing chronic homelessness at the local (county) level when the county governments are located within a state that is strategically aligned with the federal partnership—USICH—that leads this program.

The American intergovernmental system can be leveraged as an effective tool for achieving program outcomes that cannot be achieved by single governments. In intergovernmental research, we typically accept that the vertical intergovernmental system is based primarily in either financial incentives or legal mandates from federal to state and/or local governments. However, we find that in the absence of grants and mandates, the intergovernmental system still provides effective outcomes when the levels of government are strategically aligned. Making such a strategic decision to coordinate program implementation collaboratively across boundaries to achieve intergovernmental goals appears to be beneficial for program outcomes.

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Table 1. Distribution of Counties by States

State	Region	County	State	Region	County
		Numbers			Numbers
Alabama	South	1	Missouri	Midwest	2
Arizona	West	2	Nevada	West	2
California	West	30	New Hampshire	Northeast	1
Colorado	West	1	New Jersey	Northeast	15
Connecticut	Northeast	2	New York	Northeast	16
Florida	South	14	North Carolina	South	8
Georgia	South	4	Ohio	Midwest	8
Idaho	West	1	Oklahoma	South	2
Illinois	Midwest	12	Oregon	West	5
Indiana	Midwest	1	Pennsylvania	Northeast	13
Iowa	Midwest	1	Tennessee	South	4
Kansas	Midwest	4	Texas	South	3
Kentucky	South	2	Vermont	Northeast	1
Maryland	South	13	Virginia	South	6
Massachusetts	Northeast	5	Washington	West	6
Michigan	Midwest	17	Wisconsin	Midwest	3
Minnesota	Midwest	3			

Table 2. Distribution of State with and without State Interagency Councils on Homelessness

Table 2. Distribution of S	State with and without State Interag			
	Before Opening Doors 2009	After Opening Doors 2010-2012		
Treetment Group	Alabama	2010-2012 Alabama		
Treatment Group	Alabama	Arizona		
(State with SIC)	- Colomodo			
	Colorado	Colorado		
	Connecticut	Connecticut		
	Florida	Florida		
	Georgia	Georgia		
	Iowa	Iowa		
	Idaho	Idaho		
	Indiana	Indiana		
	Kansas	Kansas		
	Kentucky	Kentucky		
	Massachusetts	Massachusetts		
	Maryland	Maryland		
	Minnesota	Minnesota		
	Missouri	Missouri		
	-	North Carolina		
	New Hampshire	New Hampshire		
	-	New Jersey (2012)		
	Nevada	-		
	Ohio	Ohio		
	Oklahoma	Oklahoma		
	Oregon	Oregon		
	Pennsylvania	Pennsylvania		
	Tennessee	- -		
	Texas	Texas		
	<del>-</del>	Vermont (2012)		
	-	Virginia		
	Washington	Washington		
Comparison Group	Arizona	-		
(State without SIC)	California	California		
(State Willout STC)	Illinois	Illinois		
	Michigan	Michigan		
	New Jersey	New Jersey (2010 – 2011)		
	-	Nevada		
	New York	New York		
	North Carolina	New TOIK		
	North Carollia	Tennessee		
	Vormant			
	Vermont	Vermont (2010 – 2011)		
	Virginia	- · ·		
	Wisconsin	Wisconsin		

Table 3. Variable Description

Variable  Variable	Description	Source
Outcome Variables Chronic Homelessness per 100,000 population	Homeless individuals who continuously experienced homeles sness for more than three years in a year for a county	2009-2012 HUD's annual r eports on Homelessness
Permanent Beds per 100,0 00 population	Numbers of beds in permanent supportive housing available on the night in a year for a county	2009-2012 HUD's annual r eports on Homelessness
Key Independent Variables Interaction (Posted*Treate d)	County governments located within a state that have a SIC on homelessness after the Opening Doors program started (1 if y es and 0 if otherwise) in a year for a county	
Post: Opening Doors	Time variable of county governments after Opening Doors was created (1 if year and 0 if otherwise) in a year for a county	2010 Opening Doors Document
Treated: State Interagency Council	Location variable of county governments located within a state that has a SIC (1 if year and 0 if otherwise)	USICH's and States' websites
Covariate Variables Total Homelessness Grant per capita State Plan	Total amount of federal homelessness grants in a year for a county  County governments located within a state that have a state pl an on homelessness in a year for a county (1 if yes and 0 if ot herwise)	2009-2012 HUD's annual r eports on Homelessness State Governments website s
County Plan	County governments that have their own plan on homelessnes s in a year for a county (1 if yes and 0 if otherwise)	County Governments webs ites
Median Income	Median household income in a year for a county	2009-2012 US Census Data
Unemployment	Percentage of the unemployed population in a year for a count y	2009-2012 US Census Data
Poverty	Percentage of the population who live at or below the poverty level in a year for a county	2009-2012 US Census Data
Non-white population	Percentage of the non-white population in a year for a county	2009-2012 US Census Data
Median House Value	Median gross house value in a year for a county	2009-2012 US Census Data
Democratic Vote	Percentage of vote for Democratic Party in a recent presidenti al election in a year for a county	2009-2012 Atlas of Preside ntial Elections
Democratic Party Governo	County governments located within a state that have a govern or from Democratic Party in a year for a county	State Governments Websit es

Table 4. Difference in Two Groups' Socioeconomic, Housing, and Political Characteristics

Before Opening Doors After Opening Doors					
	(2009)		(2010 - 2012)		
	Treatment	Comparison	Treatment	Comparison	DID
Median Income	51,755.21	60,829.57	53,627.33	60,353.49	2,348.19
	(12,965.5)	(16,393.25)	(13,793.38)	(16,705.37)	(2,348.37)
Non-white Population	21.99	25.46	23.06	26.99	-0.45
	(13.72)	(11.98)	(13.54)	(12.72)	(2.08)
Unemployment	9.44	9.60	8.31	9.37	-0.90**
	(2.37)	(3.01)	(1.97)	(3.33)	(0.41)
Poverty	14.08	12.46	15.02	14.46	-1.06
	(5.28)	(4.82)	(5.41)	(5.02)	(0.82)
Median House Value	201,675.4	313,450	196,851.4	285,187.2	23,000
	(86,828.43)	(161,298.6)	(84,914.4)	(158,486.1)	(19,000)
Democratic Vote	55.64	58.32	54.79	57.57	-0.09
	(11.38)	(9.81)	(11.58)	(10.26)	(1.74)
Democratic Governor	0.75	0.60	0.44	0.65	-0.35***
	(0.43)	(0.49)	(0.49)	(0.47)	(0.076)

Table 5. DID Results

	Outcome Variable: Ch	ronic Homelessness per	Outcome Variable: Permanent Bed per 100,000		
	100,000 population		population		
	Model 1	Model 2	Model 3	Model 4	
	2009-2012	2008-2013	2009-2012	2008-2013	
Treatment (Post*Treated)	-7.38*** (2.69)	-6.09* (3.41)	9.88** (3.84)	12.93** (5.05)	
Post	9.51** (4.13)	2.91 (4.45)	19.8*** (5.60)	19.87** (7.93)	
Treated	8.37** (3.52)	7.67** (3.76)	-7.42 (4.59)	-8.85** (4.14)	
Federal Homelessness Grant	-0.14 (0.81)	-1.21 (1.00)	0.31 (3.27)	1.30 (2.48)	
State Strategic Plan	-3.11 (3.01)	0.46 (2.65)	-3.52 (5.20)	-2.00 (6.48)	
County Strategic Plan	-0.49 (4.48)	3.29 (5.31)	-1.27 (4.66)	-5.32 (5.54)	
Median Income	0.0002 (0.0004)	-0.0002 (0.0003)	0.0001 (0.0006)	0.0004 (0.0004)	
Non-white Rate	-0.22 (0.30)	-0.25 (0.23)	0.63** (0.21)	0.56** (0.26)	
Unemployment Rate	0.90 (0.98)	1.01 (0.80)	2.66 (1.62)	1.96 (1.46)	
Poverty Rate	-0.58 (0.61)	-1.57** (0.72)	-0.26 (1.04)	0.15 (0.68)	
Median House Value	0.00004 (0.00007)	0.00009 (0.00008)	0.0001 (0.0001)	0.00008 (0.00006)	
Democratic Vote	0.75***(0.27)	0.94*** (0.28)	-0.97 (2.04)	-1.20 (1.89)	
Fed-State Same Affiliation	4.02** (1.92)	4.91** (1.94)	7.53** (3.25)	4.67 (2.87)	
Year Fixed Effects	Y	Y	Y	Y	
County Fixed Effects	Y	Y	Y	Y	
Numbers of Counties	208	208	208	208	
Total Observations	783	1199	809	1210	
F-test	1.91	3.06	8.87	9.19	
Probability > F-test	0.02	0.0001	0.0000	0.0000	
Adjusted R2	0.91	0.88	0.94	0.93	

Note. Robust clustered standardized errors are in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Two-tailed test