

**From transportation equity to transportation justice: Within, through, and beyond the state**

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**Abstract**

Transportation policies, plans, and projects all flow through state institutions because of the substantial cost of infrastructure and the need to assess transportation system performance, including equity. But environmental justice scholarship interrogates the state's role in perpetuating injustice. Most research and planning practice related to transportation equity has relied upon state-sponsored analytical methods. Transportation planners and scholars can benefit from critical assessments of these approaches. We propose a shift in focus from transportation *equity* to transportation *justice* that is more closely aligned with models of social change promulgated in the environmental justice literature and related movements.

Keywords: environmental justice, transportation justice, transportation planning, state, social movements, community participation

## Introduction

Transportation justice describes a normative condition in which no person or group is disadvantaged by a lack of access to the opportunities they need to lead a meaningful and dignified life. It involves transforming the structures and processes that lead to the inequitable distribution of transportation's multiple externalities (e.g. noise, pollution, visual intrusion, risk of bodily harm, and exposure to law enforcement, among others) across populations and space. Also essential to this notion of transportation justice is that residents and other stakeholders should be able to actively participate in and influence the decisions that affect their lives.<sup>i</sup> In this way, struggles for transportation justice echo those embedded in the broader environmental justice movement that recognizes a deeply-rooted history of injustice and advocates for addressing structural issues of race, ethnicity, and capital to produce fair processes, an equitable distribution of outcomes, and a recognition of diverse forms of knowledge in decision making (Schlosberg 2004). Available evidence on disparities in automobile ownership rates, trip-making behavior, mode choice, activity participation, and exposure to environmental burdens suggests that people of color, low-income people, people with disabilities, older adults, and youth are at risk of various forms of transportation injustice (e.g., Blumenberg and Manville 2004; Blumenberg and Ong 2001; Golub, Marcantonio, and Sanchez 2013; Golub and Martens 2014; B. D. Taylor and Ong 1995).

Correcting these injustices would require a recognition of historical and current processes that lead to injustice and a structural redistribution of resources throughout society, including both political power and financial capital. But transportation planners around the world more commonly focus on technical fixes and quantitative "equity" analyses that illustrate how the benefits and burdens of transportation plans and projects are distributed, often relying upon large-scale simulation models of future land use and travel behavior (Karner 2016; Manaugh, Badami, and El-Geneidy 2015; Martens, Golub, and Robinson 2012). Public involvement is also solicited, but it is often *pro forma*, and its results are unlikely to affect ultimate decisions, a result replicated across multiple issue domains (e.g., Arnstein 1969; Innes and Booher 2010; Karner et al. 2019; Karner and Marcantonio 2018; Rowe and Frewer 2000; 2004; Shilling, London, and Liévanos 2009). Importantly, the impetus for such efforts stems from the formal authority of the state to regulate and finance transportation improvements (Marcantonio et al. 2017; Martens and Golub In press). Receipt of public funds requires adherence to a litany of laws and regulations related to public involvement, anti-discrimination, and reporting (Marcantonio et al. 2017). In practice, these quantitative equity analyses and public involvement efforts have at times resulted in incremental changes, but they mainly reform—rather than transform—the transportation system and leave unchanged the power positions and well-being of disadvantaged populations (Sanchez, Stolz, and Ma 2003).

Two different perspectives—"transportation justice" and "transportation equity"—regularly appear in the literature and practice. The justice framing is more common among activist groups and non-governmental organizations (e.g., Untokening Collective 2017) while the term equity is more commonly used by state actors. This may reflect underlying differences in each groups' perspective on the desirability of transformation of social structures (justice) in contrast with reform of the processes and distribution of social goods and opportunities (equity).<sup>ii</sup> Concerns related to justice and equity have permeated the planning literature and practice for decades (e.g., Fainstein 2005; 2011; Krumholz and Forester 1990; Martens 2016; Martens and Golub In press; Reece 2018; Soja 2010). These authors and others point to strong normative principles about

what constitutes just outcomes and who can and should decide what is just. Accordingly, they are often skeptical of the state's ability to achieve justice.

In this article, we draw from critical perspectives in environmental justice studies to advance the literature and practice of transportation equity towards transportation justice with a focus on the United States.<sup>iii</sup> We first synthesize relevant transportation planning and environmental justice literature before reviewing transportation equity/justice in practice to highlight key challenges and opportunities for achieving meaningful change. Applying critical environmental justice perspectives to transportation planning generates implications for scholars, practitioners and advocates.

Looking forward, we argue that state-centric strategies such as developing new equity-oriented tools, metrics, and planning processes are necessary, but not sufficient to achieve transportation justice, and that planning scholars, practitioners and advocates must continue to reflect on the benefits and limits of state-centric strategies and develop new ways of engaging with environmental justice and related social movements in order to achieve transformational change. We argue that approaches which emphasize the agency and power of community-based organizations and acknowledging and addressing structural factors which negatively affect certain people and places will be crucial for achieving justice.

### **From transportation equity to transportation justice**

Planners have a longstanding interest in engaging with and seeking to advance the normative goals of equity and justice across multiple issue areas (e.g., Arnstein 1969; Davidoff 1965; Fainstein 2011; Krumholz and Forester 1990; Krumholz and Hexter 2019; Soja 2010). In transportation planning literature and practice, these concerns are most frequently referred to using the phrase “transportation equity.”

Scholars engaging in transportation equity research and practice are fundamentally concerned with who benefits from and who is burdened by transportation infrastructure or transportation planning activities. But from this high-level set of concerns, many difficult choices must be made regarding demographic groups of concern, performance measures, and their interpretation. Put simply, we need to identify equity “of what” (i.e., what good is being distributed), “for whom,” and “how much” (e.g., Karner 2016; Karner and Niemeier 2013; Manaugh and El-Geneidy 2012). In addition, the definition of what is a ‘just’ distribution and by what moral, legal, or philosophical basis this decision can be made has long been debated in the literature (e.g., Hunold and Young 1998; Young 2011). In the United States, a legacy of racialized decision making has focused attention on people of color and low-income people. In European contexts, populations at risk of “social exclusion” from a lack of access to adequate transportation are of primary concern. There, specific population groups are not necessarily identified *a priori*, but rather individuals and locations at risk of low participation in the activities necessary to lead a meaningful life are identified and addressed (Lucas 2004; 2012).

Multiple scholars have sought to better define the outcomes that should be sought when pursuing transportation equity (e.g., Martens 2012; Schweitzer and Valenzuela 2004). Access to opportunities is widely accepted as the most important benefit of a transportation system (Martens 2012; 2016; Pereira, Schwanen, and Banister 2017), although there is debate on its appropriate measurement (K. T. Geurs and Van Wee 2004; Handy and Niemeier 1997; Kwan 1998). Burdens encompass a range of environmental ills linked most strongly to proximity to

roadway infrastructure (e.g., air pollution, noise, vibration) (Karner, Eisinger, and Niemeier 2010; G. M. Rowangould 2013). Displacement resulting from infrastructure construction also has disparate impacts across demographic groups, with people of color and low-income people bearing disproportionate displacement burdens from interstate highway construction in the US as well as some public transit infrastructure (Mohl 2002; Self 2005; Sheller 2015).

The literature has also addressed normative questions—what should be considered fair or equitable (Martens and Golub In press; Pereira, Schwanen, and Banister 2017)? Martens (2016) argues a “sufficientarianism” theory that considers transportation benefits to be fairly-distributed when no population groups fall below a threshold defining a minimum acceptable level of accessibility. In arguing this position, Martens is most closely aligned with the capabilities approaches pioneered by Amartya Sen and Martha Nussbaum. Capabilities approaches have been widely applied in transportation research (Beyazit 2011; Hananel and Berechman 2016; Yang and Day 2016). This perspective emphasizes expanding freedom of choice and self-fulfillment; accordingly, it assesses not what people do but rather what they can do. Setting a sufficiency threshold would be nontrivial. Rather than defining how such a threshold ought to be calculated, Martens (2016) argues that a political process of multi-party negotiation should be undertaken for its determination.

In other work, Martens and Golub (In press) identify a “ladder of justice standards” linked to specific pieces of US planning law and guidance ranging from strict legal compliance to “restorative equalization.” Strict legal compliance has been widely criticized in part because it is easy to achieve as long as an agency conducts some equity-related analysis (e.g., Sanchez, Stolz, and Ma 2003). Others have argued that, at best, legal compliance or other low justice standards simply seek to not make existing conditions worse while eliding the substantial gaps in transportation benefits and burdens that already exist when considering population groups and places (e.g., TransitCenter 2018). The restorative equalization standard, on the other hand, is the strongest in terms of its implications for transportation planning practice because it requires prioritizing historically disadvantaged communities to receive a disproportionate share of benefits to mitigate prior inequities.

Each of the existing perspectives and practices highlighted above is characterized by an emphasis on state actors (i.e., public-sector decision makers and planners) and state-sponsored and legitimated analytical tools. These approaches have generally not worked to achieve transformative outcomes in the transportation system and mitigate prior injustice. One reason for the uneven performance of existing approaches can be gleaned from the literature on environmental justice and related social movements (e.g., Harrison 2015; Konisky 2015; e.g., D. Pellow 2018; D. N. Pellow and Brulle 2005). Those authors identify the formal mechanisms described above as “state-centric.” Environmental justice scholars have described how the state works to bolster rather than constrain racialized attacks on vulnerable communities as evidenced through legacies of slavery, redlining, and inequitable enforcement of civil rights and environmental laws (Pulido 2017; Pulido, Kohl, and Cotton 2016; Ranganathan 2016).

As an alternative, many environmental and transportation justice advocates pursue “society-centric” approaches that emphasize social movements working with and on behalf of disadvantaged populations and communities, sometimes in collaboration but often in conflict with public-sector planners and public agencies (e.g., Grengs 2002; Karner and Duckworth 2019; Marcantonio and Karner 2014). Decades of grassroots community organizing, coupled with the

availability of financial resources as well as legitimation from ideologically aligned philanthropic organizations, has engendered a vibrant non-profit and grassroots advocacy sector that seeks to make progress on these issues (e.g., Attoh 2019; Grengs 2002; Karner et al. 2014; Karner and Duckworth 2019; J. K. London 2016; Mann 2004; Pastor, Benner, and Matsuoka 2009).

At the same time, there are a range of potential problems in relying solely on the non-profit sector as the agent of justice transformation. First, there are limitations of financial resource sustainability and technical capacity. Non-profits may experience mission creep to follow financial resources and to seek broader political acceptance from powerful state and corporate actors thus, taking them away from their original and often more militant roots. This shift towards the mainstream can also occur as grassroots organizations professionalize and move from being outside agitators and critics of public agencies to inclusion as members of advisory committees and other collaborative forums (Perkins 2015; Kohl-Arenas 2015; INCITE! 2017; McCarthy 2004). Furthermore, no community is monolithic, and “community-based” non-profit organizations must constantly navigate and negotiate often competing interests and agendas. Sometimes the social forces encoded in the society-centric approach are not progressive at all, and instead represent parochial or regressive tendencies (Creed 2006), such as Not In My Backyard (NIMBY) that can lead to opposition to affordable housing or projects to increase access by lower-income and racially-diverse populations to areas of urban amenities such as bike-paths and parks (Weitz 2008). In these situations, state agencies that take the more progressive position than social actors.

With these caveats in mind, it can still be said that many society-centric approaches seek to transform the unjust structural conditions in which the current institutional order is (re)produced in order to transform the transportation system in contrast to many state-centric equity approaches which tend to take a more reformist orientation. A reformist approach to transportation justice could include improving travel demand models to include new indicators and metrics to better reflect equity or distributional considerations. In contrast, a transformational approach could range from the creation of a community-based transportation board with authority over significant portions of a regional transportation agency’s budget to the more radical promotion of new paradigms for urban planning that recognize the “right to the city” (Harvey 2013; Lefebvre 1992; Marcuse 2012) for historically marginalized populations over the interests of the capitalist growth machine (Logan and Molotch 2007) and the structuring role of neoliberal interests (e.g., Peck, Theodore, and Brenner 2013). As Lefebvre (Lefebvre 1996, 158) put it, “[The right to the city] can only be formulated as a transformed and renewed right to urban life.” This latter notion is grounded in fundamental values of justice and therefore extends beyond most existing conceptions of transportation equity which depend on state-centric models of anti-discrimination and civil rights (e.g., Attoh 2019; Karner and Niemeier 2013; Marcantonio et al. 2017).

The environmental justice literature has a long history of assessing both the power and pitfalls of state-centric and society-centric approaches to achieving more just outcomes from public policy (Cole and Foster 2001; Harrison 2015; Holifield, Chakraborty, and Walker 2018; Pulido 2017; Sze and London 2008). Both state- and society-centric approaches have strengths and weaknesses, but the perspectives from this literature have not been explicitly applied to transportation planning, which in practice adopts various approaches that span the state- to

society-centric spectrum. In the following section, we summarize several existing approaches that can be used to pursue more just transportation systems.

### **Pursuing transportation justice: State- and society-centric approaches**

Schlosberg (2004) outlines a conceptual framework of justice, identifying three broad prerequisites: fair *processes* for decision making that involve relevant parties, an equitable distribution of *outcomes*, and the true *recognition* of diverse types of knowledge. This framework is situated within the environmental justice literature, which has explored the connections (and disconnections) between state and societal actors. In this section we draw from this literature to frame transportation-related social movements and current transportation planning practice in terms of the roles of state and societal actors. We then use this framework to identify practices that have the potential to move transportation planning practice toward deeper engagement with affected communities for truly transformational change; in other words, shifting practice from transportation equity to transportation justice.

Social movements that engage with transportation-related issues have emerged and adapted to changing regulatory, legal, and planning contexts to engage in struggles for the just distribution of transportation benefits and burdens and inclusion in transportation planning processes. Environmental justice research frames these struggles as arising from differing visions for the relationship between state-centric and society-centric approaches (e.g., Cole and Foster 2001; Harrison 2015; Holifield, Chakraborty, and Walker 2018; Pulido 2017; Sze and London 2008). State-centric approaches vest primary authority, expertise, and agency in the hands of state entities while society-centric approaches ground the legitimacy of planning and social action in the will of the people. This distinction can be described with reference to the Greek roots of *polis* (city state) and *demos* (community) or the colloquial terms “top-down” and “bottom-up.” Of course, the state and society are mutually constitutive (that is, the state is ultimately an expression of society and most societies have some kind of collective governance). However, in practical terms, there are substantial differences between a planning process initiated by a transportation agency in which residents are invited to participate and those initiated by social movement organizations that seek to change or oppose state policies and plans or even create new systems of community governance outside those currently sanctioned by the state. These differences include not only who is in control of the process, but also what is discussed: what community concerns and visions are raised and prioritized, which populations and places are considered, and how changes in transportation infrastructure and policy, and other community features are proposed.

In practice, society-centric measures for achieving transportation equity and justice can orient more towards the “inside” or “outside” of state institutions (e.g., Krumholz and Forester 1990; Doussard 2015). Inside approaches seek to engage social movement actors in existing state initiatives and formal public engagement approaches. These could include service on advisory committees or providing feedback on a plan performance assessment. Outside strategies encompass what are more typically thought of as social movement approaches and include various types of direct action and organizing that occur outside of the purview of state-sponsored activities and view the state as a target of action. Importantly, outside strategies are not entirely separate from the state; they could, for example, include using one branch of the state (the courts) against state transportation agencies or initiating a community-based discussion of

community needs that is subsequently brought to the state for incorporation into state-centric planning spheres.

To help visualize and elaborate upon different strategies for achieving transportation equity and justice, Table 1 places a sample of common planning activities on a continuum from the most state-centric to most society-centric. For each strategy, we describe strengths and challenges, the definition of justice, recognition of knowledge, and examples from the literature and practice. Note that the table entries are ideal types; as such they are not meant to represent every possible implementation of each strategy but rather are stylized descriptions abstracted over the authors' experience with and knowledge of each strategy.

The most state-centric strategies (#1-2) reflect the reality that transportation projects entail substantial public capital investments and successful project execution requires navigating a vast array of federal, state, and local laws and regulations. Because of the role of state institutions in facilitating transportation decisions and funding transportation investments, strategies that place state entities as the primary actor are the most used. This dominance results in nearly all of Table 1's strategies involving the state in some way, even if it is as the target of opposition.

On the other end of the spectrum, heavily society-centric strategies involve community-based analysis (#5) and community organizing (#6) as conceived and led by community-based organizations, allowing them to closely adhere to their vision, needs, and priorities. Falling between the two ends of the spectrum are litigation and administrative complaints (#3) and participatory budgeting (#4), both of which operate within a state framework but place significant agency in the hands of community organizations and residents. In particular, litigation and administrative complaints and community organizing provided the transportation equity movement with its first wins and continue to change state-initiated policies and plans.

Each strategy in Table 1 could be undertaken with varying degrees of procedural or distributive justice and in turn reflect different recognition of the knowledge of state entities and of social movement organizations and local residents. For example, strictly state-centric strategies, which often marginalize or tightly control community voice, tend to have lower-levels of procedural and recognition justice, which may interfere with the achievement of distributive justice. However, the state-sanctioned character of these strategies may provide legitimacy for the allocation of funds for disadvantaged populations that society-centric strategies might not. Conversely, society-centric strategies tend to have high levels of procedural and recognition justice that have the potential to empower vulnerable communities to demand and win concessions from state agencies. On the other hand, social movement organizations and coalitions may not have the political power needed to achieve these distributional goals on their own and need equity-oriented state actors to provide assistance. Faced with otherwise overwhelming corporate power, social movements can appeal to the state to protect the public good through a variety of means. That is, social movements can sometimes be potent champions for state power in the face of a neo-liberal onslaught by market-based ideologies, deregulation, and a capital-dominated society.

In practice, every planning effort will involve both state and society actors and some will employ more than one of the approaches listed in Table 1 at different points along the state/society-centric spectrum. Historically, state-centric efforts have tended to dominate planning practice; this has meant that strategies are sponsored by the state but also that state perspectives are privileged. Society-centric approaches are becoming more common but often take place within



state-sponsored contexts (e.g. during an environmental review process, board meetings, or hearings). Many agency-led descriptions of best practices tout society-centric elements such as advanced public involvement, elements of community-based analysis, and leveraging community-based organizations (Department of Transportation 2015; Federal Highway Administration 2013). In many cases these processes have been described by agencies as leading to incremental changes to decision-making processes or outcomes, such as consideration of a new alternative or additional project mitigations. For example, when planning a highway project in Denver, the Colorado Department of Transportation implemented extensive traditional participation strategies as well as emerging strategies (such as door-to-door outreach, meetings from the block to corridor scale, and forming a “Preferred Alternative Collaboration Team” which included community representatives) to inform the agency’s purpose and need definition and reported that these activities led to consideration of two additional alternatives (Federal Highway Administration 2013).

Likewise, planning initiatives can move along the state/society spectrum over time. Community groups can initiate a discussion of community needs and then bring them to an agency for implementation. US DOT reported that this occurred with Chicago’s Riverwalk and with the design of a bus rapid transit system in Virginia (US Department of Transportation n.d.). Similarly, an agency-initiated project can morph into something more inclusive that reflects a broader set of community-identified needs. This often occurs as a response to advocacy by community groups, as an FHWA guidebook indicates happened in Atlanta during the planning of pedestrian improvements along Buford Highway when community advocates effectively demanded that the project scope include safety improvements in addition to aesthetic improvements (ICF International 2011).

We suggest that there is room for planners to become more open to and actively support society-centric approaches both by providing more opportunities during state-sponsored activities for residents to express themselves and shape outcomes but also to become comfortable with limiting the state’s role and allowing society-centric actors to become change agents and leaders. At the same time, there are contexts in which maintaining robust state involvement is important to protect social justice values from the power of market influences. Below, we describe each of Table 1’s proposed strategies in greater detail and provide further examples of each.

### **Agency-led analysis**

Performance-based planning has long been a goal of both transportation practitioners and academics. In short, performance-based planning typically involves calculating measures that describe outcomes from a transportation plan. These could include health effects, air pollution emissions, collision rates, energy consumption, or hours of delay, among others. The promise of performance-based planning is that these measures describe key outcomes of interest to the agency and members of the public and facilitate comparisons between alternative scenarios. In practice, performance-based planning can provide false certainty for less common or more novel metrics (such as non-auto travel or collision rates) relative to more traditional performance measures (such as vehicle delays or congestion levels), because the travel demand models used to evaluate outcomes were built to assess these more traditional measures, and tools for integrating more contemporary concerns into the planning process are relatively less well developed (Handy 2008). In almost all cases in practice, the agency itself is responsible for undertaking this type of performance analysis on data that it generates.

Performance-based planning efforts often extend to considerations of civil rights and environmental justice analysis. Formal environmental justice law and guidance emphasizes an agency-led performance analysis process, from data collection and analysis to the determination of disproportionate impacts and the selection of alternatives and mitigations. This is true of federal transportation agencies including the US Department of Transportation (US Department of Transportation 2016; US Department of Transportation Office of the Secretary 2012), the Federal Highway Administration (Federal Highway Administration 2012; 2015), the Federal Transit Administration (Federal Transit Administration 2012a; 2012b), as well as under National Environmental Policy Act guidance (Council on Environmental Quality 1997). Regional planning guidelines also follow in this vein (California Transportation Commission 2017).

Multiple authors have evaluated and critiqued typical agency-led transportation equity analysis processes (Karner 2016; Karner and Niemeier 2013; Martens, Golub, and Robinson 2012). Such analyses differ depending on the particular planning activity being assessed (e.g., regional plan, policy change, improvement program, service change, or individual project) and the level of staff effort available to conduct the analysis. In general, some effort is made to identify the community or population under study and to quantify performance outcomes for them under different transportation-land use scenarios. Baseline differences between the community or population and a reference group can be assessed, as can changes from the baseline to a future year scenario. Determining whether the results demonstrate evidence of (in)equity is often left until the analysis is conducted. In general, the process is imbued with substantial subjectivity. Defining *a priori* standards for what constitutes inequity (e.g., a 10-percentage point difference in the measure under examination, or baseline differences that exceed a standard deviation or more) is considered best practice (Federal Transit Administration 2012a, IV–13) but is hardly ideal.

### **Traditional public participation**

The transportation planning process is required to occur in consultation with affected communities, with opportunities for meaningful, early, and frequent involvement of the public and disadvantaged populations widely described as an important part of the agency-led decision-making process (California Transportation Commission 2017; Council on Environmental Quality 1997; Federal Highway Administration 2015; Federal Interagency Working Group on Environmental Justice & NEPA Committee 2016; Federal Transit Administration 2012b; US Department of Transportation 2016; US Department of Transportation Office of the Secretary 2012). Traditional public participation strategies include providing information using notices and documents posted publicly, facilitating opportunities for input using public meetings and hearings or by receiving written comments, and documenting responses to input received. These efforts are typically assessed in terms of the number of opportunities for participation; their convenience in terms of meeting time, location, format; and how easily people can access materials and opportunities. The latter considerations include providing advance notice, translated materials and/or interpreters, visual aids, use of electronic and web media, and providing information in familiar community spaces.

Despite these requirements, the value of community insights and the purpose of public participation in agency documents varies. Many include descriptions of informing the public in order to support effective participation, e.g., “ensure... access to information” (Council on Environmental Quality 1997, 4), although in some cases that description points to parts of the process that are locked in before public engagement occurs. Others describe allaying concerns;

for example, “provide... access to public information... including information that will address the concerns of minority and low-income populations” (US Department of Transportation Office of the Secretary 2012, 7). Many emphasize listening (Federal Interagency Working Group on Environmental Justice & NEPA Committee 2016, 10). Occasionally guidance goes further, identifying community power as valuable, for example “empowering communities to have a meaningful voice” and “ensur[ing] that affected communities are able to influence decision outcomes” (US Department of Transportation 2016).

Many emerging examples of public participation strategies move further toward the society-centric end of the spectrum to include practices such as building trust by using neutral facilitators as well as leveraging and growing relationships with community members, attending community-run forums rather than inviting the community to agency meetings, and using different engagement strategies like focus groups, interactive activities and games at public meetings and workshops (Aimen and Morris 2012; Department of Transportation 2015; Federal Highway Administration 2013; 2015; Federal Interagency Working Group on Environmental Justice & NEPA Committee 2016; Federal Transit Administration 2012b; Lane, Anolik, and Morris 2016; National Cooperative Highway Research Program 2009; TransitCenter 2018; Transportation for America 2014).

Agency-led participation strategies can also include existing community organizations and take advantage of their capacity. For example, agency staff can maintain contacts with community-based organizations and leaders, attend community organizational meetings, provide financial resources to community organizations to engage with decision makers, use community liaisons to conduct outreach, or hire staff from within the community to lead outreach (Aimen and Morris 2012; California Transportation Commission 2017; Department of Transportation 2015; Federal Highway Administration 2013; ICF International 2011; TransitCenter 2018).

Agencies can go even further by training community leaders and members of existing community-based organizations about the transportation planning process and data analysis in order to empower them to participate in the transportation planning arena (Aimen and Morris 2012; California Transportation Commission 2017; Metropolitan Washington Council of Governments 2017; Transportation for America 2014; US Department of Transportation 2016). At the same time, community members can assist in training of agency staff on environmental justice in building cultural competencies and community-engagement methods (US Department of Transportation 2016).

### **Litigation, administrative complaints, and conflict resolution**

Conflict resolution between state and societal actors often occurs inside the formal legal system or through administrative complaints investigated and adjudicated by federal executive agencies. Legal options are particularly attractive to communities seeking relief since Title VI of the 1964 Civil Rights Act and President Clinton’s 1994 Executive Order 12898 prohibit both racially discriminatory decision making on the part of recipients of federal funds and disproportionately high and adverse impacts on low-income and people of color populations. As defined in the Civil Rights Act and other anti-discrimination law, “racially disparate impact” can be demonstrated by showing that a particular behavior, policy, or practice results in racially disparate outcomes in the absence of a legitimate justification for those same outcomes. Thus, disparate impacts can manifest even in the absence of an intent to discriminate.

In 1994, a grassroots organization called the Bus Riders Union (BRU) successfully challenged the transportation decision-making of the Los Angeles County Metropolitan Transportation Authority (LACMTA) by alleging Title VI violations (Grengs 2002; Mann 2004). Specifically, the BRU alleged that LACMTA's policies and practices were creating two separate and unequal transit systems by raising fares and cutting local bus service mostly used by low-income people of color to fund rail expansions that would be mostly used by wealthier white residents. Plaintiffs argued that these planning decisions unfairly discriminated against people of color. The case was ultimately settled, with LACMTA agreeing to a consent decree that forced them to hold fares constant while expanding bus service. Although it was not the first such lawsuit (Kennedy 2004), the BRU case was the first that was successful, and it spawned others to follow its approach (e.g., Golub, Marcantonio, and Sanchez 2013; Lo and Rein 2010; Marcantonio et al. 2017).

The use of a neutral arbiter may move control of the conflict resolution process closer to the middle of the state/society spectrum. For example, a pedestrian bridge project in Michigan employed an ombudsman from within the community for dispute resolution (Federal Highway Administration 2013). This strategy may have promise for resolving conflict and avoiding litigation in other decision-making processes. Another strategy for heading off conflict is a community benefit agreement, which formalizes an understanding between an agency and community stakeholders (Aimen and Morris 2012; Metropolitan Washington Council of Governments 2017). Agencies commit to deliver community benefits (like jobs or environmental improvements) associated with a project in exchange for support from the community. These are typically used in cases in which a public subsidy has been provided to a project, triggering the rationale that such projects should produce a public benefit to affected communities (Gross, LeRoy, and Janis-Aparicio 2002).

### **Participatory budgeting**

Participatory budgeting (PB) refers to the practice of allocating a share of a public budget to address needs identified by residents. These residents typically vote on budget priorities and are ultimately responsible for determining their preferred allocation across different projects, project types, and locations. First employed by the Brazilian Workers' Party in the late 1980s (Goldfrank 2011), PB has since spread around the world, with upwards of 8,000 efforts completed or ongoing as of 2018 (Dias and Júlio 2018). The literature indicates that high-quality PB implementations include four key features: 1) a commitment to allocate funds in a participatory manner and to let participants write key process rules (Lerner and Secondo 2012), 2) outreach that specifically targets and engages underrepresented and marginalized populations (Hayduk, Hackett, and Folla 2017; Kasdan and Markman 2017), 3) an appropriately sized operating budget to fund staff time and technical assistance (Gilman 2016, 130–33), and 4) a large and flexible budget to be allocated to community priorities that is not restricted to specific project types (Lerner and Secondo 2012; Su 2017a).

The PB approach can be extended to transportation finance and project selection. Drawing from the global and domestic implementation of participatory budgeting approaches, Karner and Marcantonio (2018) propose dedicating a share of a transportation agency's discretionary budget to meet needs identified by community-based organizations, adequately resourcing community participation in the process, and committing to track progress towards meeting community-identified goals over time. Without funds dedicated to support community-based organizations in providing input, an exercise that purports to direct resources to disadvantaged communities is at risk of perpetuating past injustices. In California's San Joaquin Valley, the Fresno County

Council of Governments (also serving as the county-level metropolitan planning organization) established a mini-grant program to support the public involvement efforts of advocacy organizations and schools during their most recent regional transportation plan update (California Transportation Commission 2017; J. K. London 2016).<sup>iv</sup> This effort was effective because the regional equity advocates were able to connect their state-focused policy advocacy campaign to a “ground-game” of grassroots community organizing. Such vertical integration of policy advocates with frontline communities is necessary to ensure that the advocacy represents the interests of the most vulnerable people and places.

### **Community-led analysis**

Assessed plan performance is one key input in the transportation decision-making process. In order to deliver helpful information, any performance analysis should accurately reflect the effects of the transportation system and appropriately represent community needs. Although considerations of scope and assumptions may be informed by community input, when planning agencies are solely in control of the analysis, the extent to which the community can affect relevant parameters will likely be limited.

In contrast, the community leaders themselves can lead or collaborate directly with planners on quantitative analysis of project or plan outcomes. Some emerging public participation strategies include community-based data collection and analysis. For example, an agency report describing promising practices under NEPA mentions the use of community data (with outside validation), discussing and responding to “reasonable opposing views,” encouraging communities to design their own plan alternatives, and conducting health impact assessment (HIA) or social impact assessment (SIA) with assistance from other entities (Federal Interagency Working Group on Environmental Justice & NEPA Committee 2016). Similarly, incorporating scenario planning or other visualization or modeling tools into public meetings and workshops or making such tools available online allows community members to conduct analysis within public participation venues (ICF International 2011; Transportation for America 2014). Agencies can also make their data accessible to the public (Metropolitan Washington Council of Governments 2017). However, these approaches tend to position communities as sources of data for state agencies rather than holders of power.

In other cases, community groups have been able to go further, taking the lead in the analysis. In the San Francisco Bay Area, members of a coalition called “Six Wins for Social Equity” successfully lobbied for the inclusion of a community-based alternative transportation and land use scenario to be modeled alongside the agency’s preferred alternative. While the full community plan was not adopted, key elements of it were, and the participants were able to leverage this success in later processes (Marcantonio and Karner 2014). In the Bay Area case, as in others, residents or community groups partner with academic institutions or public agencies for funding and/or to perform the analysis (Aimen and Morris 2012; J. K. London et al. 2018). A related avenue involves “citizen science,” whereby residents themselves collect and share data (in collaboration with scientists) to better understand and communicate community concerns (Bonney et al. 2014; Corburn 2005).

Transportation impact assessments can be conducted independently by community organizations often in partnership with academic researchers. For example, in the Fresno County participatory budgeting example described above, a community-led HIA (which included analysis guided by

the advocates and performed by academic researchers) was used by community advocates to identify transportation needs and impacts and to communicate those needs and impacts to the Fresno County Council of Governments (Karner et al. 2014).

### **Community organizing**

Communities facing historical and institutional racism and other forms of discrimination often employ direct action to move themselves from the margins to the center of decision-making. Since they do not control financial capital, they must build on their social and political capital—or people power—by banding together in social movements. Social movements involve mass mobilization of people to confront pressing social issue, often demanding structural changes in systems of oppression (Piven and Cloward 2012). They often have a political ideology and a cognitive framework (Benford and Snow 2000; Snow et al. 1986) that creates a collective identity binding the members together around a common cause. These movements deploy multiple tactics, including consciousness raising, leadership development, and popular education, all intended to inform direct actions such as protests, sit-ins, boycotts, and policy advocacy (Alinsky 1989; Freire 2018). The common factor across all such activities is community empowerment and applying that power to effect real-world outcomes.

For example, four transit advocacy groups in New York City formed a coalition in 2016 to advocate for improvements to the bus system; in the two years after their efforts began, several of the agencies involved in the bus system have initiated plans and actions addressing many of the coalition's requests (TransitCenter 2018). In 2010, Clayton County, Georgia, completely eliminated its public transit service in the midst of a fiscal crisis. In the wake of that decision, several coalitions formed with the goal of restoring service. With no formal public involvement channels available because the local transit agency had ceased to exist, the coalitions had to rally supporters, grow their numbers, and identify suitable forums in which to advocate for the changes they sought (Karner and Duckworth 2019). This approach involved a concerted and ultimately successful effort on the part of statewide and local philanthropic organizations, Black churches, and residents to press the county commission to place binding ballot measures during multiple election cycles.

## **Relative strengths and challenges of state- and society-centric strategies**

### **State-centric strategies**

The environmental justice movement's relationship with the state has both deep and contradictory roots. Scholars and movement activists alike have debated the limits of a reformist versus a transformative approach to social change. On the one hand, the movement was founded in conflict with the state over racially discriminatory actions and inadequate protections against environmental harm (Bullard 2000; Cole and Foster 2001; McGurty 2007). On the other, the movement has based much of its strategy on appeals to the state's commitment to the liberal values of civil rights and equal protection (Pulido 2017; Pulido, Kohl, and Cotton 2016; Ranganathan 2016). This connection with the liberal state is natural, given the origin of the EJ movement in the cultural context, leadership, and tactics of the modern civil rights movement. Likewise, for populations under duress from a neoliberal political and economic system that often treats them as sites for resource extraction, sinks for pollution, and sources of captive labor (Martínez-Alier 2012), appeals to the state can appear as the only refuge (Harrison 2015; Perkins 2015).

Many scholars have critiqued this vision of the liberal state as savior through depictions of the *illiberal* state that works to bolster, not constrain the racialized attacks on vulnerable communities as evidenced through legacies of slavery, redlining, and inequitable enforcement of civil rights and environmental laws (Pulido 2017; Pulido, Kohl, and Cotton 2016; Ranganathan 2016). Nonetheless, the environmental justice movement has achieved some significant victories using state-centric approaches to reshape transportation policies and plans. These have included the infusion of environmental justice principles throughout the federal and some state governments as well as the prevention and remediation of particularly egregious hazardous facilities sited in communities of color (Bullard 2000; D. Taylor 2014).

The overall record of state-centric approaches in improving material conditions in disadvantaged communities has been mixed at best. Despite policies on the books (and the few litigation successes mentioned above), there are precious few examples of successful implementation (Konisky 2015; Pulido 2017; Pulido, Kohl, and Cotton 2016). This outcome raises the question of why state-centric models of achieving environmental justice have been the norm, not the exception, and why they have generally not succeeded. It also suggests that transportation equity and justice practitioners and advocates should be wary of relying too heavily on the state as neutral arbiter.

What can account for this disconnect between the promise of state protections of environmental justice and its failures to deliver such protection? One answer lies in the limits of the state to restrain the workings of capital that generally disadvantage, exploit, and harm low-income communities and communities of color (Faber 2008; Schnaiberg, Pellow, and Weinberg 2002). To some extent this outcome reflects the relative power of the state and capital as social forces. The tendency for “state capture” of public agencies by corporate interests and the production of the “pollution industrial complex” (Faber 2008) can partially explain this power imbalance.

A more pointed critique of the role of the state in perpetuating environmental injustices is the notion of “racial liberalism” that describes the founding of the liberal order of the United States, not as a bastion of universal human rights, but based on processes of extermination of indigenous people and enslavement of Africans and continued denial of protection for disadvantaged populations (Pulido and De Lara 2018). Scholars including Ranganathan (2016) and Pulido (2017) analyze current EJ struggles such as those over the poisoning of African Americans by lead-laden drinking water in Flint, Michigan and the chronic violations of toxic regulations by the Exide battery factory in Los Angeles as examples of the functions of what Kurtz (2009), recalling Goldberg (2002), calls the “racial state.” The function of the racial state in producing and reproducing racial injustice leads Pulido to argue that “Environmental racism must be seen in the context of a long line of diverse forms of state sanctioned violence that facilitates racial capitalism” (2017, 529). She argues further that a state-centric approach to justice is destined to fail because,

The state is deeply invested in not solving the environmental racism gap because it would be too costly and disruptive to industry, the larger political system, and the state itself. Instead, the state has developed numerous initiatives in which it goes through the motions, or, ‘performs’ regulatory activity, especially participation. (Pulido 2017, 529)

Instead, she and other researchers call for EJ activists to turn away from their attempts to appeal to or reform the state and instead “to begin seeing the state as an adversary that must be confronted in a manner similar to industry” (Pulido, Kohl, and Cotton 2016, 27).

These critiques pose a significant challenge for EJ activists, scholars, and equity-minded planners seeking to use state mechanisms to achieve environmental justice. The above critiques should provoke a reconsideration of how successfully these efforts will address the structural causes of environmental injustice. It suggests that achieving environmental justice is not possible only through technical fixes and public participation in formal planning efforts and may also require broader social mobilization in an “outside game” that seeks to transform, not merely reform, the state’s transportation regime. Moving beyond state-centric models may push many transportation planners out of their comfort zone but recognizing the limitations and perceptions of traditional planning and developing new collaborative relationships with environmental justice social movements may be needed to achieve goals of transportation equity.

### **Society-centric strategies**

Considering the challenges and limitations of state-centric approaches, the shifting legal landscape and difficulties with securing redress under the law have led to changes in research foci and advocacy strategies. Some of the most promising innovations are not being generated by planning agencies or academic researchers, but by equity advocates, the communities they represent, and the society-centric approaches they pursue. Community-directed equity analyses (sometimes conducted in partnership with researchers) have the potential to empower participants, reveal policy-relevant results, and potentially change plans (Karner et al. 2019; 2014; Karner and Duckworth 2019; J. K. London 2016; Marcantonio and Karner 2014). Participatory budgeting avoids many of the shortcomings of traditional public participation efforts by putting communities in the “driver’s seat” with respect to defining and determining progress towards their stated goals.

Whether any of the approaches listed in Table 1 can result in transformational changes in the lives of ordinary residents or challenge state hegemony in transportation policy remains to be seen. Contemporary theories on social transformation drawn from studies of successful labor movements have emphasized the need to grow and sustain an engaged base of regular members rather than relying on dedicated activists to support the cause (Brofenbrenner et al. 1998; Gruelle and Parker 1999; McAlevy 2016). Drawing on lessons learned from labor history, these authors and others argue that such “deep organizing” is necessary to create crisis conditions for the state and capital by either the threat or action of withholding labor during a strike (McAlevy 2016; McAlevy and Ostertag 2014). The extent to which these lessons can be extended to the transportation planning arena are still unclear. Worksites and shop floors have historically been fruitful sites for organizing. But to build a powerful constituency organized around transportation justice-related issues, organizers have had to rely on transit vehicles and culturally important community locations as sites to reach potential participants who may have much less in common than workers employed at the same location (e.g., Karner et al. 2019).

Society-centric approaches are not a panacea. Most importantly, their success depends upon large numbers of individuals coming together united by a common set of beliefs articulated through effective framing to act against perceived injustice or in favor of justice-promoting policies and practices. Putting such a group together is difficult as, for some time, dominant theories of urban change entirely ignored the role of non-profit advocacy organizations (Jones-Correa and Wong 2015) and instead privileged the role of elected officials and business elites (Stone 1989; 2015). The literature on social movements has enumerated the various factors that must coalesce to lead to success, including the larger “opportunity structure” that must shift to facilitate collective action, the need to mobilize resources appropriate to the task at hand, an



inclusive and empowering collective identity, and a social movement frame that can unify and motivate change (e.g., Grengs 2002; Sicotte and Brulle 2017; Benford and Snow 2000).

Both “inside” and “outside” strategies entail different types of risks. The risks of the “inside game” are well known. Arnstein (1969) articulated the dominance of tokenistic models of participation, wherein advisory committees are formed to provide the appearance of representation, only for their input to be ignored. Participants in inside games may also become coopted by state bodies, surrendering their more militant oppositional capacities and functions for a “seat at the table” (Harrison 2015; Liévanos 2012; Selznick 1949; Coy and Hedeem 2005). Related critiques have been leveled at formal public engagement efforts more generally, where it is difficult to see how public involvement efforts lead to changes in preordained outcomes (Innes and Booher 2004; Karner and Marcantonio 2018). Additional examples appear in the literature where environmental justice stakeholders were included in various inside processes, only to have their input marginalized when it did not comport with perspectives supported by the state and capital (e.g., J. London et al. 2013; Shilling, London, and Liévanos 2009). Inside approaches fundamentally rely on appeals to the state, and thus their outcomes may be limited by the willingness and ability of state institutions to meet community needs.

Outside approaches face similar risks, particularly that of marginalization (Sicotte and Brulle 2017). Especially in instances where “official” participation channels have been established and legitimized, state representatives are likely to argue that those participating in outside activities are attempting to subvert the normal procedure and their voices will be delegitimized as not collaborative and even “too radical.” But understandably, traditional channels of public involvement, whether through standard notice-and-comment rulemaking or two-minute testimonies at public meetings, can be rather limiting. The power of the outside game—when successful—lies precisely in its ability to circumvent and rise above more typical approaches to public involvement to militate for fundamental social change (e.g., Gamson 1990; Piven and Cloward 2012). As noted above, however, the effectiveness of the outside game is dependent on obtaining and sustaining adequate financial resources, technical capacity, and overall political power.

Finally, outside strategies face the very real threat of violent repression (Earl 2003) that is either not effectively countered or even perpetuated by the state. While this is more common in the global South, the global North is not immune to this as evidenced by the violent state-sanctioned reaction including beatings and sometimes killings of Civil Rights and anti-war activists into the late 1960s and, more recently, Black Lives Matter activists and other opponents of police violence being deemed part of “civil insurrections” in the contemporary era.

To be sure, society-centric approaches that locate agency with non-state actors have certainly led to many surprising and inspiring transportation justice “wins” (e.g., Karner and Duckworth 2019; Verlinghieri 2019; Enright 2019; Sagaris 2015). But facilitating the emergence of social movements capable of initiating and sustaining transportation justice movements still depends on the factors identified in the social movement literature—political opportunities, resources, the capacities to build and sustain large-scale protest and other oppositional strategies. These things are critical yet challenging to secure, especially in the technocratic arena of transportation planning.

## **Within, through and beyond the state? The frontiers and limits of transportation justice**

Given the state's substantial role in transportation planning, finance, and service delivery, contemporary "wins" typically involve novel combinations of state and society-centric strategies rather than solely society-centric strategies that operate outside state efforts. These can bring transportation planners and advocates into new collaborative relationships and that place disadvantaged communities at the center of concern. They also challenge transportation planners to consider unfamiliar sources of knowledge and engage with communities in novel ways.

Three recent examples of this type of integrated approach illustrate the promise of hybrid approaches: focusing performance assessments on community-identified groups or geographic areas and modeling scenarios guided by regional equity ideals. The first approach has not been extensively studied in the literature to date. It must be based upon a robust public engagement effort that seeks to identify and address the needs of underserved and disadvantaged communities. Rowangould et al. (2016) showed how this process can be applied in practice by using travel demand model outputs from Fresno County, in California's rural San Joaquin Valley, to study the implications of different definitions of environmental justice communities on the outcomes gleaned from a transportation equity analysis. The results are instructive for transportation policy makers and planners. Specifically, when the analysis highlights conditions in disadvantaged unincorporated communities identified through a community organization-led process, the results can be quite different than those that are produced when a more regional, or aggregate, approach is taken to community definition. In that work, transit accessibility in the identified locations was shown to be a fraction of that expected elsewhere in the region. As noted above, the results of this analysis were used by community organizations to advocate for the adoption of a needs assessment and grant program by the Fresno County Council of Governments. The program is now being used to identify areas of need and provide funds to design and implement transportation improvements in those areas (J. K. London 2016). Essential to the success of this effort was a highly organized regional-scale transportation and environmental justice coalition that could contend with state agencies on their own terms.

Stewart (2017) describes a novel hybrid workshop process undertaken in both Boston, MA and Santiago, Chile which sought to bring transport stakeholders, including non-expert members of the public together to explore the "implementation gap" concerning the failure of novel planning tools to be adopted by practitioners. Further, the researchers explored differences between ways of knowing and understanding transport costs and benefits across different stakeholders and levels of expertise. Using a structured interaction process and interactive maps, participants discussed various scenarios through the lens of accessibility. As the scenarios were essentially hypothetical, these workshops did not result in any tangible, on-the-ground network changes, however, this method offers promise as a way to bring state and community-centric voices into dialogue with one another to foster mutual understanding around goals and tradeoffs of planning scenarios.

Another example, introduced above, is provided by efforts in the San Francisco Bay Area, where there is a history of assessing and modeling regional transportation plans crafted by community-based organizations. Prior transportation and land use planning scenarios were generally focused on traditional environmental issues or smart-growth-type scenarios. In response to the 2013 regional transportation plan update, a regional equity coalition bridging traditional

transportation-related concerns along with affordable housing, community development, public health, and economic opportunity sought to include an equity-focused scenario among the alternative plans considered by the Metropolitan Transportation Commission (MTC). The community-developed scenario, titled Equity, Environment, and Jobs (EEJ) was ultimately included in the environmental impact report (EIR) prepared by MTC (Marcantonio et al. 2017; Marcantonio and Karner 2014). The results of the accompanying performance analyses demonstrated that the EEJ outperformed MTC's preferred plan in terms of greenhouse gas emissions, air toxics emissions, transit ridership, and displacement risk.

The reasons for this impactful performance were clear. EEJ emphasized increasing transit levels of service and increasing the supply of affordable housing in suburban areas with high concentrations of low-wage jobs to affordable housing as well as proximate to high quality transit stations. While the EEJ scenario was not adopted in its entirety, some changes to MTC's proposed scenario were won, including the potential for increased transit operating funds and anti-displacement protections. Here again, a powerful social movement was able to use state-centric planning contexts to achieve—at least partially—its own ends.

Movements for transportation justice must envision solutions and strategies that move beyond those promulgated solely by the state. But, at least in the near term, the state will be intimately involved in all areas of transportation planning and programming. This means that integrating society-centric perspectives into state efforts will be a reasonable strategy. Longer term, however, other emerging strategies, like tactical urbanism (Marshall, Duvall, and Main 2016), and sustained participatory budgeting efforts can either supplant the state or place societal actors in a relatively more powerful position. These efforts will be crucial for winning power—building and sustaining the engaged and organized base of participants needed to realize transformational social change in face of seemingly overwhelming odds.

## Notes

<sup>i</sup> Various definitions that converge on these themes have been proposed in the literature. See, e.g., Karner et al. (2016; 2018) and Martens (2016).

<sup>ii</sup> Still others have suggested that even the notion of justice is too limiting as it emerges from civil rights-era struggles and flawed notions of the liberal state and frames that fundamentally rely upon state action for mitigation (Attoh 2019).

<sup>iii</sup> A global investigation would uncover different findings, suggesting that the state can undertake radical transportation-related efforts to advance the ideals of social and economic justice. Curitiba, Brazil, Bologna, Italy, and La Paz, Bolivia all offer examples of such large-scale change. While undertaken in notably different political-economic environments than the United States, these examples illustrate one of our broader arguments, that both state- and society-centric approaches can be used to advance the ideals of justice.

<sup>iv</sup> [https://www.fresnocog.org/wp-content/uploads/publications/RTP/Regional Transportation Plan Mini grant announcement.pdf](https://www.fresnocog.org/wp-content/uploads/publications/RTP/Regional_Transportation_Plan_Mini_grant_announcement.pdf)  
[<https://perma.cc/KJK5-RXPH>]

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## Tables

**TABLE 1. State- and society-centric strategies for achieving transportation equity and justice**

	<b>Strategy</b>	<b>Whose knowledge and perspective is privileged?</b>	<b>Strengths</b>	<b>Challenges</b>	<b>What is considered just?</b>	<b>Examples</b>
1	Agency-led analysis (data, modeling, indicators)	* The state	* Established approach * Reproducible * Explicit and quantified measurements of equity	* Substantial discretion afforded agencies meaning that results may not comport with “ground truth” or may not be convincing to society actors * Often focused on preventing inequitable changes rather than addressing current inequities *Expert-driven process requiring substantial technical capacity can exclude community voice	A quantitative result showing that disadvantaged populations benefit at least as much as a reference population and are not burdened more than they are.	* Karner and Niemeier (2013) * Karner (2016)
2	Traditional participation (e.g. public hearings and meetings, written comments)	* A blend, with regulatory agency as the final arbiter (varies substantially based on implementation)	* Established approach * Ensure that community voice is at least heard by decision makers * Emerging participation methods offer more meaningful community engagement	* Surfaces problems more than identifying solutions * Can reduce trust in government if no changes made or if the process is perceived to be unjust * Little accountability	Appropriate number of participants, meetings at convenient times, appropriate locations, with materials that accessible in multiple languages.	* Aimen and Morris (2012)
3	Litigation, administrative complaints, and conflict resolution	* A blend, with regulatory agency as the final arbiter (varies substantially based on implementation)	* Promise of real relief from injustice * Can establish precedent and avoid future injustices	* Often insurmountable legal bar for some categories of claims * Substantial resources (time, money, skill) needed to succeed * Confrontational and may result in lasting acrimony	A positive outcome for the equity-oriented group bringing the lawsuit or complaint. This could result in a positive shift in plan priorities or the rejection of an entire unfavorable project.	* Los Angeles Bus Riders Union (Grengs 2002) * Darenburg v. MTC (Marcantonio et al. 2017) * Harbor Bridge Title VI Complaint (Lado 2017, 26–28)

4	Participatory budgeting	* A blend, with significant community voice based on implementation	<ul style="list-style-type: none"> <li>* Availability of real funds makes the process more salient</li> <li>* Encourages a conversation about community needs</li> <li>* Signals to stakeholders that their needs are taken seriously</li> <li>* Process of allocating funds deepens dialogue between agency and stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>* Overall budget share allocated likely to be small</li> <li>* Can gloss over more structural issues related to the allocation of other budget shares</li> <li>* Reduces equity issues to financial distribution</li> </ul>	The allocation of resources to community-identified priorities.	<ul style="list-style-type: none"> <li>* Karner and Marcantonio (2018)</li> <li>* Fresno, CA (Karner et al. 2019)</li> <li>* Vallejo, CA (Lerner 2014)</li> <li>* New York (Su 2017b)</li> </ul>
5	Community-led analysis (data, modeling, indicators)	* Society	<ul style="list-style-type: none"> <li>* Ensure that the analysis accounts for community needs</li> <li>* Empowering to use data on par with agencies</li> <li>* Can build connections with academic researchers</li> <li>* Build community knowledge</li> <li>* Increase community (and potentially state) buy-in of results</li> </ul>	<ul style="list-style-type: none"> <li>* Agencies can refuse to acknowledge the results as valid if they did not come from their sources</li> <li>* Requires significant technical expertise within or accessed by advocacy organizations</li> </ul>	A quantitative result that reflects community-identified priorities.	<ul style="list-style-type: none"> <li>* Six Big Wins (Bay Area) (Marcantonio and Karner 2014)</li> <li>* Community Alternative 7 (I-710, Los Angeles, CA) (Karner et al. 2018)</li> <li>* Rowangould et al. (2016)</li> </ul>
6	Community organizing/mobilization	* Society	<ul style="list-style-type: none"> <li>* Established approach</li> <li>* Empowers communities</li> <li>* Address root causes of inequity (racism, classism etc.)</li> <li>* Provides a clear pathway for community engagement (facilitates connections between the public and state actors)</li> </ul>	<ul style="list-style-type: none"> <li>* Confrontational strategies can weaken relationship with state and limit future collaboration</li> <li>* Privileges the most militant voices</li> </ul>	<p>Likely to vary based on campaign but could result in a shift in plan priorities, the rejection of a project, or proposal of an entirely new project</p> <p>A qualitative measure of community empowerment and support of the outcome.</p>	<ul style="list-style-type: none"> <li>* Karner and Duckworth (2019)</li> <li>* Grengs (2002)</li> <li>* MARTA Army (Green 2017)</li> </ul>