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ABSTRACT

Problem, research strategy, and findings: Social equity goals are supposed to be prioritized in planning along with economic and environmental goals, yet in practice they are often de-emphasized. We developed a publicly available plan equity evaluation tool to investigate to what extent and in what ways local governments incorporate goals and recommendations that would advance equitable outcomes in their comprehensive plans. Using plan content analysis, we find that most plans do not talk about equity, nor do they include many goals and recommendations that would advance equity. More recent plans, plans in communities with more planning capacity, plans in coastal communities, and plans with strong public participation processes have stronger equity orientations. Limitations of our study include that we had a small sample size of 48 plans in a single state, our coding was partly conducted by volunteers, and our study is limited to plan content and so did not investigate existing conditions or equitable outcomes.

Takeaway for practice: Plans should make equity a guiding principle. Planning processes need to be multifaceted. Plans should identify vulnerable people and geographic areas and ensure equitable protection from hazards and equitable distribution of amenities. Future land use changes should be more transparent.

Keywords: capacity, equity, plan evaluation, sustainability, vulnerability

n S. D. Campbell's (1996) foundational planner's triangle, social equity is one of three main planning goals, along with environmental protection and economic development. The AICP Code of Ethics says that planners should aspire to "seek social justice by working to expand choice and opportunity for all persons, recognizing a special responsibility to plan for the needs of the disadvantaged and to promote racial and economic integration" (APA, 2016). Local comprehensive plans should thus emphasize equity goals to a similar extent as they emphasize environmental and economic goals. Yet, in practice, plans often deemphasize equity goals or disguise them as an efficiency or economic benefit (Berke & Godschalk, 2009; S. D. Campbell, 2016; Fainstein, 2010; Liao et al., 2019; Moore, 2016).

In this study, conducted in partnership with the Michigan Association of Planning (MAP) Social Equity Committee, we investigate to what extent and in what ways local governments incorporate goals and recommendations (including plan processes, information, and strategies) that would advance equitable outcomes in their comprehensive plans and what community characteristics and plan and planning process characteristics can help explain differences in plan equity orientation. We developed a publicly available comprehensive plan equity evaluation tool that covers many aspects of equity, including the planning process, housing, environmental justice, transportation access, and economic development. Given that planners pledge to make equity a central part of their practice, plans should include equity-related goals or strategies in all of these areas. However, based on a dual-coded content analysis of 48 local comprehensive plans, we conclude that equity is not a main focus of most plans. We find that fewer than half of our sample plans mention equity at all. Many plans do not include race and income in their demographic analyses. Only 42% of plans include a goal that mentions affordable, workforce, or fair share housing, and less than a guarter mention equitable environmental protection. If planners are supposed to emphasize equity to the extent that it is one of three pillars of planning, plans are not yet living up to that expectation. We find that newer plans, plans with more multipronged public participation processes, and plans in coastal communities and communities with more planners on staff have a stronger equity focus.

In this study, we present an analysis of our results and offer a set of good practices to increase emphasis on equity in local comprehensive plans, many of which would be simple to implement. Land use planning is redistributive by nature, both because it allocates public resources and facilities and because it arranges land uses in ways that may have costs and benefits, winners and losers (Harvey, 1973; Talen, 1998). The planner's task, then, is to make that redistribution more

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transparent so that participants must ask and answer the question, "Does this goal/policy/decision make the most vulnerable people in our community better off or worse off?" Although this study indicates that many communities are not asking themselves such questions, we are optimistic that this situation can change for the better (H. Campbell et al., 2014).

In the next section, we explore the body of research on planning equity. We then explain our methodology, including the development of the equity evaluation tool, intercoder agreement, and our analytical approach. Next, we present and discuss the major findings about how the communities in our study dealt with equity issues in their plans. Finally, we offer good practice suggestions for how planners may improve the equity focus of future comprehensive planning efforts.

Equity as a Planning Goal

Planning involves redistribution by allocating public resources and facilities, including those that have negative externalities (Talen, 2008). Thus, the issue of equity is not a special case where redistribution matters but an inescapable fact of planning. Everyday planning practice, such as zoning, has in the last century commonly been used to advance a discriminatory agenda, with varying degrees of intentionality. These practices persist (APA, 2019; Pendall, 2000). Equity has also been a tenet of planning practice for many years, although it has nearly always been positioned in opposition to traditional downtown-oriented planning (Davidoff, 1965; Metzger, 1996). Beginning in the 1960s, some planners, especially those in the administrations of progressive Black mayors, began explicitly to advocate for policies that would direct resources toward the poor and disadvantaged. In response to racial injustices and urban renewal, the theory of advocacy planning and more bottom-up approaches to planning gained traction, challenging planning professionals to represent the interests of low-income and working-class neighborhoods (Davidoff, 1965; Gans, 1969; Hartman, 1964). These efforts were exemplified by Norm Krumholz and his staff in Cleveland (OH) in the 1970s (Krumholz, 1982). By the 1990s, the AICP Code of Ethics included a section that stated, "A planner must strive to expand choice and opportunity for all persons, recognizing a special responsibility to plan for the needs of disadvantaged groups and persons" (APA, 1991, p. 1).

In S. D. Campbell's 1996 article, "Green Cities, Growing Cities, Just Cities?," he elevated social equity to equal status in the planner's triangle with economic development and environmental protection. Yet in practice, it seems to be the most neglected of the three (S. D. Campbell, 2016; Moore, 2016). Campbell identifies two conflicts related to equity within the planner's triangle. The property conflict, between equity and economic growth, encompasses issues such as gentrification and affordable housing (S. D. Campbell, 1996). The development conflict, between social equity and environmental preservation, has to do with making decisions that involve tradeoffs between protecting the environment (perhaps in a way that reduces economic opportunity) and materially improving the lives of the most vulnerable. In our opinion, Campbell overstates the conflict because activities that are environmentally harmful often disproportionately harm disadvantaged people.

The era of the equity planner has come and gone, and although in theory the ideas of that era have been absorbed into mainstream planning thought, it often seems as though efforts to promote equity must be disguised as or ancillary to efficiency goals (Bollens, 2002; Fainstein, 2010; Provo, 2009). Recently, there has been renewed interest in equity at the national level and as a component of sustainability, although there is some evidence that local government planning processes do not reflect this emphasis (APA, 2019; Lens & Monkkonen, 2016; Liao et al., 2019; Oden, 2010).

What Does Equity Mean in Planning?

Equity in planning is broadly concerned with access to resources and opportunities for those who are disadvantaged (Talen, 1998). Equity seeks to expand choices and increase agency (APA, 2016; Israel & Frenkel, 2018). Fundamentally, equity is about distributing public resources in favor of those who are less well off (Fainstein, 2010). Those who need additional resources include "groups most lacking in political and financial power and most subject to disrespect," which, in the United States, have included people of color, people with disabilities, low-income people, women, children, and the elderly (Fainstein, 2010, p. 56; Warner & Zhang, 2019). However, equity may look different in different types of communities, and people in different places "hold different ideas of what constitutes well-being and a good life" (Israel & Frenkel, 2018, p. 648).

What Does Equitable Planning Look Like?

Different planning subfields emphasize different aspects of equity, but all find that equity concerns are at the center of planning decisions and debates. In public participation, the expectation is for an inclusive planning process in which residents, stakeholders, and experts come together to engage in shared plan and decision making where at least some power is transferred to nonexperts (Innes & Booher, 2000, 2004; Lane, 2005). However, planners must be careful, because communicative planning may disadvantage already disadvantaged groups, who as part of the process are expected to work toward a solution that benefits everyone, rather than advocating for their own needs (Brownill & Parker, 2010; Purcell, 2009; Vigar et al., 2017).

Planners who study hazards are concerned about social vulnerability because disadvantaged people are more likely to live in lower quality housing in areas more affected by storms and less likely to hear and believe warnings, have the means to evacuate, and eventually recover (Van Zandt et al., 2012; Zahran et al., 2008). Disadvantaged people are also more likely to be affected by exposure to natural and human-caused environmental hazards, many of which are becoming more extreme as the climate becomes warmer (Heckert & Rosan, 2016; Osland, 2011). And, as the world has recently seen, disadvantaged people may suffer disproportionately in pandemic events (APM Research Lab Staff, 2020). More nuanced characterizations of equity have emerged, especially as cities incorporate social equity and environmental justice into urban resilience planning, distinguishing between dimensions like distribution, participation, recognition, and context (McDermott et al., 2013; Schlosberg, 2004). Yet in general sustainability and resilience planning has been criticized for doing little more than mentioning equity, without which true sustainability cannot be achieved (Burton, 2003; Meerow et al., 2019; Oden, 2010). And even a commitment to addressing inequities in sustainability at the regional level does not yet indicate successful integration of equity into actions for improved outcomes (Arias et al., 2017; Finio et al., 2019; Zapata & Bates, 2017).

Those who look at the distribution of community facilities highlight equity concerns in many areas. Park planners find that cities tend to site and invest in parks in areas with higher incomes that already have good access to amenities, even though making the distribution of amenities more equitable would raise the quality of life of the whole city (Brambilla et al., 2013; Rigolon & Németh, 2018; Talen, 1998). Talen (2001) finds no apparent effort to minimize commutes and maximize access in school siting, even though longer bus rides for elementary school students were associated with lower test scores. With rising interest in green infrastructure, planners are watchful about how equitably those investments are allocated (Heckert & Rosan, 2016). Transportation planners and activists see equity issues in terms of spatially consistent access to transportation, the provision of alternatives to private car use, financing, and funding allocations to different modes (such as between road building and transit investment) or different routes (Delbosc & Currie, 2011; Grengs, 2002; Lowe, 2014; Martens, 2016). But social equity objectives are not as well integrated into urban transportation plans as environmental and congestion reduction goals (Manaugh et al., 2015).

Equity issues remain at the forefront of housing policy research, as planners continue to find challenges in creating enough density and mix of housing types to accommodate lower income households (Szibbo, 2016). It is difficult to achieve an equitable housing mix when many communities continue to oppose housing for middle- and low-income residents and local land use regulations add obstacles and expense to building such housing (Goetz, 2008; Lens & Monkkonen, 2016; Scally & Tighe, 2015). Planners have responded through innovative planning and regulatory approaches such as inclusionary zoning, accessory dwelling units, and the promotion of "missing middle" housing (Mukhija et al., 2010; Schuetz et al., 2009).

High levels of inequality have become a problem in cities and metropolitan areas (Piketty, 2014). Economic development planners recognize that economic development need not be in opposition to environmental sustainability and equity; rather, economic development that also helps further those goals is more effective and long-lasting than traditional business incentives (Zhang et al., 2017). The concept of a triple bottom line, which compels companies to consider society and the environment along with economy, has gained prominence in the last 25 years and has consequently shaped how frameworks for sustainability assessments have developed (Mori & Christodoulou, 2012; Pope et al., 2004). But as in planning, assessing how effectively organizations address sustainability, especially social criteria, is lacking (Labuschagne et al., 2005; Shen et al., 2011).

Taking all of these facets of equity into consideration, an equitable comprehensive plan would be created through an inclusive public participation process. It would recommend an arrangement and mix of land uses that provides enough housing for all income levels, with access to multiple transportation modes. It would identify vulnerable populations and neighborhoods and plan for their protection from natural and human-caused hazards, including those likely to be exacerbated by climate change. The plan would identify and seek to correct inequities in the provision of community facilities. The plan would recommend economic development strategies that benefited the community as a whole, including its most vulnerable members.

Are Planners Looking for Equity in Comprehensive Plans?

Equity has not been a traditional focus of literature evaluating comprehensive plans. The model plan quality evaluation checklist, from *Urban Land Use Planning* (Berke & Kaiser, 2006), a widely used planning textbook, does not mention equity, although it does ask about gathering the views of a broad spectrum of stakeholders (Stevens, 2013). Baer (1997) considers equity alongside a long list of other considerations under the concept of "adequacy of scope" but does not give it the third point of the triangle status as Scott Campbell (1996) conceptualizes it. Berke and Manta Conroy (2000) include equity as one of the six principles of sustainability and find that plans generally promoted affordable housing programs but included little else that would advance equity. Berke and Godschalk (2009) suggest that plan quality evaluation efforts could expand to include additional topics, including equity, but we are unaware of any efforts that comprehensively focus on equity.

Michigan Planning Context

Michigan is one of the United States' most politically fragmented states, with 1,856 units of local government. The state is divided into counties. Counties are further divided into cities, townships, and villages. Most of these local governments conduct their own zoning and many conduct their own long-range planning. Governments that do their own planning are required to update the plan every 5 years, but this may simply mean making a determination that conditions in the community have not materially changed and the plan does not need to be significantly updated. Plans form a legal backbone for zoning, but they are not required to be implemented and are not legally binding (Loh, 2012). The local comprehensive plan (referred to in Michigan as a master plan) epitomizes "ordinary" planning practice (H. Campbell et al., 2014, p. 49).

How Do Plans Incorporate Equity Goals and Recommendations?

In this study, we ask to what extent and in what ways local governments (cities, townships, and counties) include goals and recommendations that would advance equitable outcomes in their comprehensive plans. To investigate this question, we gathered data from 48 Michigan comprehensive plans using a publicly available equity evaluation tool and then reconciled coders' answers to ensure reliability. We tabulated descriptive results from the evaluations and developed three models using negative binomial regression analysis to test what kinds of communities include different types of recommendations in their plans. We identified and collected exemplars of good equity planning practice from the cases in our study.

The Equity Evaluation Tool

The equity evaluation tool is a publicly accessible checklist (available at Carolyn Loh's Wayne State website [Loh, n.d.]) meant for planners, local government officials, or any other interested stakeholder to evaluate how well their local comprehensive plan meets a set of equity criteria. The MAP Social Equity Committee had been working for several years to develop a set of criteria to evaluate social equity in planning practice. The committee worked together to think about what an equitable plan would look like, what elements it should include, and what it should emphasize. The committee chose to focus the evaluation tool on the comprehensive plan because it is a publicly available document that anyone could evaluate without any additional specialized knowledge about the community and because the plan is supposed to set goals and objectives that drive subsequent policy choices (Loh, 2011). This means, however, that the tool does not ask about existing conditions or zoning and therefore cannot make any inferences about the relationship between plans and current levels of equity in these communities.

We based the equity evaluation tool on best practices compiled by the committee, planning literature on equity, and the APA Planning for Equity Policy Guide (APA, 2019). We pilot-tested the tool with 10 local governments selected for geographic and demographic diversity. We launched the tool publicly in fall 2019 through an email from MAP's executive director to the entire MAP membership list. We ended up with 24 volunteer participants. We suspected that volunteer participants might be more likely to care about equity issues or to think their plans did a relatively good job on equity, so we also chose a random sample of an additional 24 local governments to add to the volunteer group, for a total of 48 plans.¹ We asked planners in those local governments whether they would be interested in evaluating their plans; five were. One of us evaluated every volunteer plan in both the original volunteer group and the random sample volunteers as a second coder. Each of us independently evaluated the remaining random sample plans.

Intercoder Reliability

The data for this project were generated in part through community science or "research that engages nonprofessionals in the process of creating new scientific knowledge" (Kosmala et al., 2016, p. 551).² This approach has become widespread in fields such as ecology and astronomy to extend resources, democratize science, and help disseminate knowledge (Burgess et al., 2017). In our case, the volunteers were planners who, although they were professionals in their own field

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Table 1. Characteristics of equity, general, and total recommendations.						
	Equity	General	Total			
Average inclusion rate	24%	54%	40%			
Range	0–18	4–19	4–36			
Count	21	21	42			

and were given detailed instructions with examples of how they were to answer the questions, were not trained researchers. In this project, we did not have the opportunity to conduct training for volunteers aside from written instructions at the beginning of the tool because participation was anonymous, nor did volunteers use the tool more than once. These limitations on the front end are reflected in the level of agreement between coders: The overall percentage agreement (including open-ended guestions) when we authors were the two coders was 78%, versus 63% when a volunteer was one of the coders. The initial percentage agreement ranged from 94% (Brooks Township) to 41% (Livingston County). Shorter, simpler plans in general had higher percentage agreement.

We therefore engaged in extensive data validation on the back end (Freitag et al., 2016). We tested for intercoder reliability by calculating percentage agreement and Krippendorff's alpha (kalpha) for guestions on which we could expect agreement (Stevens et al., 2014). Consistent with Stevens and colleagues' (2014) work on intercoder reliability in plan content analysis, we found that the more dispersed and the greater number the relevant items in a particular category, generally the lower the *kalpha* statistic. We found low or even negative kalpha values for some questions with highly skewed distributions (Feng, 2015) and suspect that some other low values may be the result of systematic disagreement between the two coders (Krippendorff, 2004). Overall, we found *kalpha* useful to flag questions to which we needed to pay particular attention during our validation process, but because of the nature of the data and the involvement of volunteers we did not impose cutoffs below which we would not use the data. See Table 1 for percentage agreement and Krippendorff's alpha calculations for the questions.

We flagged every instance of disagreement between coders, whether volunteers or researchers. We then together re-evaluated and reconciled every discrepancy. Most were instances where one of the original coders had simply missed something rather than being areas of genuine disagreement or ambiguity (Norton, 2008); the percentage of plans reporting each element usually went up when we went back to reconcile the answers. This trend suggests that it was often difficult for any single coder to find every element requested in such long and complex documents. It also suggests that as a result of our extensive validation process our revised data likely capture most occurrences of a particular plan element.

Data and Analysis

In this study, we ask to what extent and in what ways local governments include goals and recommendations that would advance equitable outcomes in their comprehensive plans. To help answer this question, we created three models to help us explain why communities might make different types of recommendations. As suggested in the literature, goals, objectives, and policies that would advance equity are often promoted for their ability to advance other goals, particularly economic ones. In our equity evaluation tool, we ask about a long list of possible recommendations that would advance equity goals that might appear in a plan. Some recommendations are explicitly equity focused, whereas others would likely have the effect of improving equity but could also fall into the category of generally accepted good planning practice. For example, adopting inclusionary zoning is a policy recommendation whose primary purpose is to increase the availability of affordable housing. We would categorize this as an equity-focused recommendation. On the other hand, many plans promote walkability. Although walkability can improve equity by making it easier for people who do not or cannot travel by car to get around, it is part of a generally accepted set of good planning practices that are promoted for many other reasons, including economic development. There were 21 equity-focused and 21 general recommendations. Our three models help explain which types of communities include these different types of recommendations in their plans. Model 1 uses a count of equity-focused recommendations as its dependent variable, model 2 uses general recommendations as its dependent variable, and model 3 uses the combined recommendations as its dependent variable. See Table 2 for a list of recommendations and their categories.

Community Characteristics

We hypothesized that certain community characteristics would influence the equity focus of the plans. We describe these independent variables in Table 3. The communities in our sample range from small rural townships to medium-sized cities and two counties with very low-income residents to very high-income residents. The most diverse community was 46% White and the least was 99% White. First, we expected that

% Included Initial % E							
Plan element	(reconciled)	agreement	kalpha	Count	general		
Overall plan organization							
What year was the plan adopted?	n/a	n/a	n/a	n/a			
Did consultants write or assist with writing the plan?	85	79	.404	82			
How many pages long is the plan?	n/a	n/a	n/a	n/a			
Does the plan include any provisions for monitoring implementation progress?	92	38	.151	44	G		
Does the plan include a demographic analysis?	92	45	.183	44	G		
Overall equity orientation							
Do the words equity/equality/fairness/justice appear anywhere in the plan?	46	60	.216	22	E		
Does the plan mention any obstacles (technical, political, legal, etc.) to implementing equitable policies?	18	77	028	9	E		
Does the plan identify geographic areas that are underserved or that have particular social needs to be addressed?	42	51	.263	20	E		
Does the plan identify groups of residents who are underserved or who have particular social needs?	65	38	.307	31	E		
Planning process							
Does the plan describe the public participation process for this plan?	79	53	.614	38	G		
Did the plan include:							
In-person visioning session(s)	46	77	.627	22			
Survey	54	70	.751	26			
Focus group(s)	27	83	.67	13			
Charrette(s)	13	89	.558	6			
Scenario planning	2	91	_a	1			
Neighborhood workshop(s)	10	85	.238	5			
Educational presentation(s)	17	83	.246	8			
Other	21	72	.3	10			
Does the plan mention how officials and/or staff incorporated that community feedback?	65	34	.411	31	G		
Does the plan mention efforts to engage historically marginalized groups?	2	70	.03	1	E		
Housing and land use							
Does the plan include a housing goal that includes affordable housing, workforce housing, and/or fair share housing?	42	45	166	20	E		
Does the plan define affordability anywhere?	19	79	.356	9	E		
Does the plan recommend the adoption of inclusionary zoning regulations of any kind?	6	92	.539	3	E		
Does the plan recommend increasing allowable residential densities in single-family neighborhoods?	38	55	.175	18	E		
Does the plan recommend increasing the amount of land planned for multifamily housing?	60	43	.067	29	E		

Table 2 (Continued).

Does the plan address housing options for seniors?	77	47	.361	37	G
Does the plan promote mixed-income neighborhoods?	33	57	.035	16	E
Does the plan promote mixed-use developments?	79	47	.476	38	G
Does the plan promote walkability?	73	51	.571	35	G
Does the plan recommend density bonuses or other incentives for affordable housing in new developments?	6	89	.605	3	E
Does the plan recommend accessory dwelling units?	29	81	.811	14	E
Does the plan address supportive/ transitional housing?	8	89	.422	4	E
Transportation					
Does the transportation plan include public transit?	60	72	.461	29	G
Does the transportation plan include Safe Routes to Schools?	29	68	.49	14	G
Does the transportation plan include Complete Streets?	58	62	.6	28	G
Does the transportation plan mention improving transportation access for low-income residents?	21	77	.402	10	E
Does the transportation plan include multi-mobility options for first- and last-mile connections to transit?	22	62	.196	15	G
Does the transportation plan require sidewalks for new development?	48	51	.065	23	G
Does the transportation plan recommend connecting existing neighborhoods with sidewalks or paths?	69	45	.477	33	G
Environment, hazards, and safety					
Does the plan mention environmental justice?	6	85	04	3	E
Does the plan mention environmental protection (air quality, noise mitigation, surface and stormwater quality) in geographic areas that are underserved or that have particular needs?	17	49	.071	8	E
Does the plan identify natural hazards?	63	53	.535	30	G
Does the plan talk about ensuring equitable protection from those hazards?	4	66	.472	2	E
Does the plan identify human-caused hazards, such as industrial pollution, nuclear radiation, toxic wastes, dam failures, and transportation or industrial accidents that result in explosions, fires, or chemical spills?	60	47	.21	29	G
Does the plan talk about ensuring equitable protection from those hazards?	2	23	.511	1	E
Does the plan talk about the impact of climate change?	15	92	.607	7	G
Does the plan make recommendations about providing residents or businesses with options for renewable energy?	56	68	.44	27	G
Does the plan mention objectives related to crime or crime prevention techniques?	27	79	.395	13	G
					(Continued

Table 2 (Continued).

Plan element	% Included (reconciled)	Initial % agreement	kalpha	Count	Equity vs. general
Community facilities					
Does the plan identify any groups of people who are underserved by community facilities?	13	81	114	6	E
Does the plan identify any geographic areas underserved by community facilities?	21	77	.453	10	G
Does the plan include at least one descriptive statement about future needs for pre-K–12 school facilities?	42	70	.563	20	G
Food					
Does the plan contain a goal related to food security/access?	15	85	.354	7	E
Economic development					
Does the plan contain a goal that suggests that economic development be equitable, or benefit the entire community, or something to that effect?	25	66	.078	12	E
Does the plan recommend a community benefits agreement ordinance or similar?	0	0	a	0	G
Future land use plan ^b					
Does the future land use plan recommend an increase in multifamily housing compared to existing land use?	54	49	.257	52	
To what extent are planned areas of multifamily housing adjacent to transit?	n/a	51	.521	n/a	
To what extent are planned areas of multifamily housing adjacent to potentially hazardous or noxious uses	n/a	34	06	n/a	
Does the plan contain a zoning plan?	75	38	02	72	

Notes: a. *kalpha* could not be calculated because one or both of the coders returned only 0. b. The future land use questions were difficult to answer both because the range of answers was a poor fit for the actual circumstances and because most plans were silent on whether or not they recommended an increase in multi-family housing and whether or not planned multifamily housing was adjacent to transit or hazards, leading coders to guess based on maps. Even when we went back to validate the answers, we could not be very sure we were characterizing the plans correctly, a problem we did not experience with any other part of the evaluation tool. We therefore report these data but do not feel they were of sufficient quality to include in the model.

more racially diverse communities would have a stronger emphasis on equity. We thought these communities would have been more likely to have conversations about how to distribute community resources in an equitable way and how to mitigate the effects of negative externalities, whereas more homogenous communities might avoid such conversations (Osland, 2011). At a regional level, more heterogeneity can lead to less intergovernmental cooperation (Gerber & Gibson, 2005), but we thought that at the local level, heterogeneity might lead to a planning process that did not evade equity issues. We thought that communities with lower median household income would have plans with a stronger emphasis on equity. We also thought that equity issues would be at the forefront in communities with larger population sizes because people living in densely populated urban areas might be more vulnerable than those in suburban or rural areas (Flanagan et al., 2011). Finally, we thought that coastal

communities might be more inclined to focus on equity in the sense of climate vulnerability given their exposure to coastal flooding, although evidence for this is mixed (Norton, 2005; Norton et al., 2018).

Plan and Planning Process Characteristics

We expected that newer plans would have a stronger focus on equity. Given conversations in our state in the past few years about inequality, we thought perhaps those ideas would influence newer plans more than older ones. We thought that higher capacity communities, measured by number of planners on staff, would have a stronger emphasis on equity. Communities that have invested in a planning department with credentialed planners would benefit from that expertise and be more likely to have plans influenced by the AICP Code of Ethics (Loh, 2011, 2012; Loh & Arroyo, 2017). We also tested whether or not the involvement of

		Expected effect			
Variable	Measured by	on equity	Range	Mean	SD
Community characteristics					
Population	2018 population ^a	+	1,099–188,482	25,207	39,282
Racial homogeneity	% White ^a	_	46%-99.8%	89%	0.12
Coastal	Boundary touching a Great Lake	+	Dummy: 81% no, 19% yes		
Median household income	Median household income in 2018 dollars ^a	_	\$31,037-\$117,670	\$58,468	18,220
Plan/process characteristics					
Capacity	No. planners on staff	+	0–3	0.82	0.88
Plan year	Year plan adopted	+	1990–2019	2012	6.34
Consultant involvement	Consultants mentioned in plan	+	Dummy: 85% yes, 15% no		
Total public participation	Count of different public participation modes used	+	0–8	2.1	2.1

Table 3. Independent variables used in the binomial regression models to predict equity focus

Note: a. U.S. Census American Community Survey, 2018.

planning consultants in writing the plan might increase its equity focus. Previous research has shown that the involvement of planning consultants can orient the plan toward smart growth principles (Loh & Norton, 2015), so we thought their involvement might also orient the plan toward equity. Finally, based on our review of the literature, we thought that communities with more robust, multimodal public participation processes would exhibit a stronger commitment to equity (Innes & Booher, 2004).

To test these hypotheses, we use negative binomial regression because our dependent variables are count variables that are overdispersed and do not contain excess zeros. We discuss the results of that analysis in the next section.

Equity Recommendations in Comprehensive Plans

We first look at descriptive results from the equity evaluation tool and then discuss the results of the negative binomial regression models.

Descriptive Results

Table 1 describes the differences between equity, general, and total recommendations. General recommendations appear with much greater frequency in the plans. The range of recommendations between the strongest and weakest plans is quite large. As shown in Table 2, only 46% of plans contained one or more of the words *equity, equality, fairness, or justice,* indicating that these concepts were not a significant influence on a majority of the plans. Moreover, of the 22 plans that did include one or more of these words, six only included standard language on mobility equity copied from Complete Streets documentation (National Complete Streets Coalition, 2020), with no other mention of equity in the plan. So only one-third of the total plans independently mentioned equity outside of the Complete Streets policy. The proportion of plans that included equityoriented goals was generally low. Housing was the highest, but fewer than half the plans included it.

A total of 42% of the plans identified geographic areas that were underserved or with particular social needs, but 65% of the plans identified groups of people who were underserved or had particular social needs. This number included age groups. Whereas 90% of the plans included some kind of demographic analysis, many plans only included age demographics, not race. Only Kalamazoo's plan mentioned efforts to include historically marginalized groups in the planning process.

Factors Influencing the Equity Orientation of Plans

Next we report the results of our models, testing which factors influence the inclusion of equity-oriented recommendations in plans. We hypothesized that more heterogeneous communities and those with lower median household incomes would show a stronger equity focus in their plans. We also thought that newer plans and plans in coastal communities and those with more planning staff would show a stronger equity focus. Table 4

	Equity-focused recommendations		General recommendations			Total recommendations			
Independent variables	IRR	SE	z	IRR	SE	z	IRR	SE	z
Population	1.00	2.03 ⁶	0.32	1.00	1.16 ⁶	0.48	1.00	1.18 ⁶	0.45
Racial homogeneity	1.95	1.38	0.94	1.83	0.78	1.43	1.87	0.78	1.52
Coastal	1.49	0.32	1.91*	1.04	0.12	0.30	1.17	0.14	1.26
Median household income	1.00	5.57 ⁶	-0.85	1.00	3.09 ⁶	-1.08	1.00	3.11 ⁶	-1.24
Capacity	1.31	0.13	2.7***	1.21	0.06	2.07**	1.18	0.07	2.93***
Plan year	1.03	0.02	1.79*	1.02	0.01	2.11**	1.02	0.01	2.49**
Consultant involvement	1.02	0.24	0.07	1.04	0.14	0.26	1.04	0.14	0.27
Public participation	1.14	0.05	2.95***	1.05	0.03	1.97**	1.08	0.03	2.97***
Summary statistics									
Number of observations	48			48			48		
LR statistic	35.01			29.45			38.81		
$Prob > \chi^2$	0.0000		0.0003		0.0000				
Pseudo R^2	0.1392		0.1097			0.1198			

Note: p < .1; p < .05; p < .01. IRR = Incident Rate Ratio; LR = likelihood ratio.

shows the results of the negative binomial regression analysis.

These models generally do not support the hypotheses that more diverse and lower income communities are more likely to have plans with a stronger equity focus. Homogeneity and median household income are not significant in any of the models. Capacity, plan year, and public participation, however, are highly significant in all of the models. A plan that is 1 year newer would be expected to include 3% more equity-focused recommendations, 2% more general recommendations, and 2% more total recommendations, holding all other variables constant. Therefore, newer plans are "better": They include a more comprehensive list of policy recommendations. Even more than that, though, they are slightly more likely to be more equitable in those recommendations. For every additional public participation mode used, a plan would have 14% more equity-focused recommendations, 5% more general recommendations, and 8% more total recommendations. Capacity shows the greatest influence on plan equity. For every additional planner on staff, all other variables being constant, a community's plan would be expected to include 31% more equity-focused recommendations, 21% more general recommendations, and 18% more total recommendations. According to our models, having more planning staff makes plans better and more comprehensive; it also makes them much more likely to include equity-focused recommendations. Coastal communities have 49% more equity-focused recommendations than noncoastal communities, but there are no significant differences between coastal and noncoastal

communities in either general or total recommendations. We speculate that coastal communities focus more on climate vulnerability than inland communities.

Are We Planning for Equity?

We find that the third corner of the planner's triangle is indeed neglected in local comprehensive plans. Partly this is because it can be genuinely hard, politically and fiscally, to recommend redistribution away from the status quo, although plans in Michigan are advisory and commit no resources by their recommendations. We argue that this neglect is also partly because planners have not been looking for and testing for equity in these plans. Compared with Berke and Kaiser's (2006) model plan quality evaluation tool, our plan equity evaluation tool focuses much more explicitly on particular plan content rather than plan structure. The model tool would give a high score to a plan that paid little attention to equity if it were well structured, written, and reasoned, whereas our tool gives much more weight to equity-related content. The equity evaluation tool allows us to see that many plans give the impression that local government officials are not aware of or interested in identifying vulnerable populations, even though they exist in even generally affluent areas. The plan equity evaluation tool used in this study is one attempt to put forward a set of expectations about what equity-related recommendations plans could include. The involvement of volunteers was meant to help disseminate the ideas contained in the evaluation

Table 5. Good equity practices for local comprehensive plans.

Plan element	Good equity practice
Overall plan organization	Ensure the plan reflects community conditions and good planning practice.
	Make sure the planning committee leadership represents the community's diversity.
	Make plan accessible to all users.
	Make sure plan data and maps comprehensively describe the community.
Overall equity orientation	Make equity an organizing principle for the plan.
	Include a detailed demographic analysis that identifies socially vulnerable populations.
	Identify neighborhoods where there are concentrations of socially vulnerable people.
Forms of public participation	Make sure the community's full range of diversity is represented in the planning process.
	Incorporate feedback into the plan.
Housing and land use	Include housing goals and objectives that provide for housing for all ages and income levels.
Transportation	Make sure there are transportation options for all residents.
	Plan for nonmotorized options.
Environment, hazards, and safety	Identify natural and human-caused hazards.
	Identify areas of high crime and/or areas where residents do not feel safe.
Community facilities	Take inventory of and map community facilities.
Food	Include goals and objectives about food security and food access.
Economic development	Make equitable economic development an explicit goal in the plan.
Future land use plan	Make future land use choices transparent.

tool and spur communities to have conversations about equity.

We find that plans in communities with more planners on staff had more equity-focused recommendations. Additional capacity has been associated with many positive planning outcomes; it is not surprising that it also influences equity. If most planners care about equity, as we suspect they do, having more planners around allows them to nudge plans toward an equity focus. This finding is especially poignant because the typical Michigan local government has no full-time planner on staff. Consultants were involved in writing 85% of the plans, so most of the plans were written by experienced, trained planners, yet having more planners on staff still seems to matter. Planners who work full time in a community develop independent knowledge of that place's social landscape, whereas consultants may only know what local officials tell them about community needs, but our study does not fully explain this finding. In any case, there is a clear role for planners to share ideas about equitable planning and lead discussions about what equitable planning would look like in a particular community.

We also find that newer plans had more equityfocused recommendations. We consider this good news, because it suggests that the idea that equity is important, advanced by both national APA and MAP, is percolating through local governments over time. However, we cannot be sure that a community's interest in equity, as expressed through the plan, will have staying power. Liao et al. (2020) find that the presence of a citizen task force is associated with more sustainability actions in following the adoption of a sustainability plan. Although our study does not measure the presence of equity-oriented citizen task forces in the local governments, the MAP Social Equity Committee has a strong and ongoing commitment to identifying and disseminating equity best practices throughout the state. The existence and efforts of this group may help keep up interest in planning for equity.

Finally, plans with robust public participation processes that involved multiple modes of gathering public input were significantly more equity focused. It is possible that participants in the process brought up equity issues and those priorities guided the plan. It is also possible that a community that invests resources in an extensive public participation process is already committed to equity, and the plan reflects that commitment.

Ways to Increase the Equity Focus of Plans

In this section, we highlight some of the major plan elements and provide some examples of good planning equity practices from our study. Table 5 presents a starting place for good equity practices and ways to incorporate those practices into plans (see the Technical Appendix for an expanded version of Table 5 that includes more detailed action steps). Communities should be able to implement most of these changes in their next planning cycle. Many of them require only better mapping and analysis or putting existing maps together in new ways. Some of these practices do require more effort, but especially in the current climate of increased awareness about racial inequality, continuing to marginalize equity in plans should no longer be acceptable.

Overall, plans need to make equity an organizing principle of the plan. Livingston County's plan, winner of national and state APA awards, serves as a model for other communities to establish equity within the framework of their plans. It has a 10-page "Social Equity" section that includes issues of aging, access to core services, and mobility. It includes examples of best practices in local governments within the county, which helps its constituent communities see local exemplars that they can emulate (Livingston County, 2018). Communities also need do a much better job of identifying vulnerable people and areas of the community and explicitly linking people to place. Plans should have a demographic analysis and explicitly identify socially vulnerable groups and underserved areas in the community. For example, as part of its extensive demographic section, Fenton Charter Township has a "Families in Poverty" map that shows although the overall poverty rate is low, families living in poverty are concentrated in one corner of the township, with rates as high as 33% in one block group (Fenton Township, 2018). This approach makes visible an issue and a group of people who might otherwise have been invisible.

Planning processes must do a better job of representing the community's diversity. Planners are already aware of this but in many cases need to work harder and more creatively. We find that increasing the types of public participation approaches is strongly correlated with a more equity-focused plan. In a large, diverse city, this might mean a multifaceted approach like Kalamazoo's:

Meetings were held throughout the City at communitywide events and in neighborhoods. The City partnered with neighborhood leaders, local businesses, nonprofits, religious institutions, and residents to spread the word about [Imagine Kalamazoo 2025] events. Outreach tools were wide-ranging: City staff knocked on doors, left flyers in little free libraries, published notes in neighborhood newsletters, and engaged through social media. (City of Kalamazoo, 2017, p. 6)

In a smaller, less diverse community with fewer resources, this might mean conducting an inexpensive online survey in addition to in-person meetings. Presque Isle Township created an online survey that received responses from more than one-third of residents, which they analyzed and found generally represented overall population characteristics (Presque Isle Township, 2014). Regardless of the type and size of the place, planners should know who needs to be heard and keep working until they have reached and included them.

Every plan can be expected to have a goal about providing a variety of housing types to accommodate all ages and income levels. We were surprised at how many plans did not have a goal related to housing affordability and how many did not explain what affordability looked like in the local context. The plan should identify any demographic groups underserved by the community's current housing stock and plan to accommodate them, as the City of Richmond does in its "Housing Needs Assessment" (i.e., young families, seniors) in the context of providing affordable housing alternatives (City of Richmond, 2002).

Communities should plan for equitable transportation access. Cities with transit should conduct analysis to see whether some neighborhoods have less access to transit (and to find out who lives in those neighborhoods). Rural communities may not have any transit, but they do have the ability to do nonmotorized planning. For example, Benton Charter Township's plan included Rural Complete Streets, with wide, paved shoulders or accompanying bike paths (Benton Charter Township, 2019).

Plans should identify natural and human-caused hazards in the community and explain whether or not climate change is likely to exacerbate them. The plan should explain whether or not some people or areas are more likely to be affected by hazards and work to ensure equitable protection. Many coastal communities in Michigan are already paying attention to these issues, but other communities must also do so. Bridgman is one such coastal community that conducted hazardspecific vulnerability assessments to build community resilience (City of Bridgman, 2019). These assessments describe current hazards such as lakeshore flooding, windstorms, and extreme heat; how they are likely to change as the climate warms; and how they are likely to affect vulnerable populations, such as those living in poverty and those with disabilities, which helps the community focus resources on those most in need.

Finally, we urge planners to make land use changes much more transparent. Plans should include tables that show changes in amount of acreage and percentage changes in land use categories. They should provide maps that highlight major land use changes. And they should explicitly link land use decisions to the information in the plan's fact base. GIS allows us to easily overlay future land use with information like hazards, transit routes, and community facilities. These maps should be included to show how decision makers have considered both hazards and amenities when planning future land uses. These three recommendations make it much more difficult to hide future land use planning that puts people in harm's way or distributes amenities inequitably.

Conclusion

Planners hold equity to be one of the most important principles of planning practice, yet it is often subsumed by other goals. In this study we evaluate local comprehensive plans to see how and in what ways local governments incorporate equity recommendations into their plans and find, in general, a very low orientation toward equity. Newer plans, plans in places with higher planning capacity, plans in coastal communities, and plans with multimodal public participation have a greater equity orientation. We provide a set of good equity practices for plans that could mostly be implemented within any community's next comprehensive planning cycle. We challenge planners to overhaul their next plan to make equity on a par with environmental and economic concerns, completing the planner's triangle.

Although we do not directly investigate implementation, we hope that more equity-focused goals and recommendations will ultimately lead to more equitable outcomes, as Liao et al. (2020) have found. In addition, we do not investigate the influence of existing equity conditions (such as in the index created by Heckert & Rosan, 2016) on plan documents. We hope that future research will investigate the links between plan equity focus, regulation (including zoning), and equity outcomes such as measures of inequality.

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SUPPLEMENTAL MATERIAL

Supplemental data for this article can be found on the **publisher's website**.

NOTES

1. We conducted independent *t* tests for the volunteer and random groups for the variables total population, median household income, and percentage White, which we felt covered the most important potential differences between the two groups of local governments. There were no significant differences between the groups' mean percentage White and median household income. The mean population size between the two groups was significantly different because the volunteer group contained more mid-sized cities and two counties. However, as we discuss, population size was not a significant explanatory factor in any of our models.

 Citizen science is the original term for this type of research, but community science is becoming more widely used (Bonney et al., 2016; Wilderman et al., 2007).

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