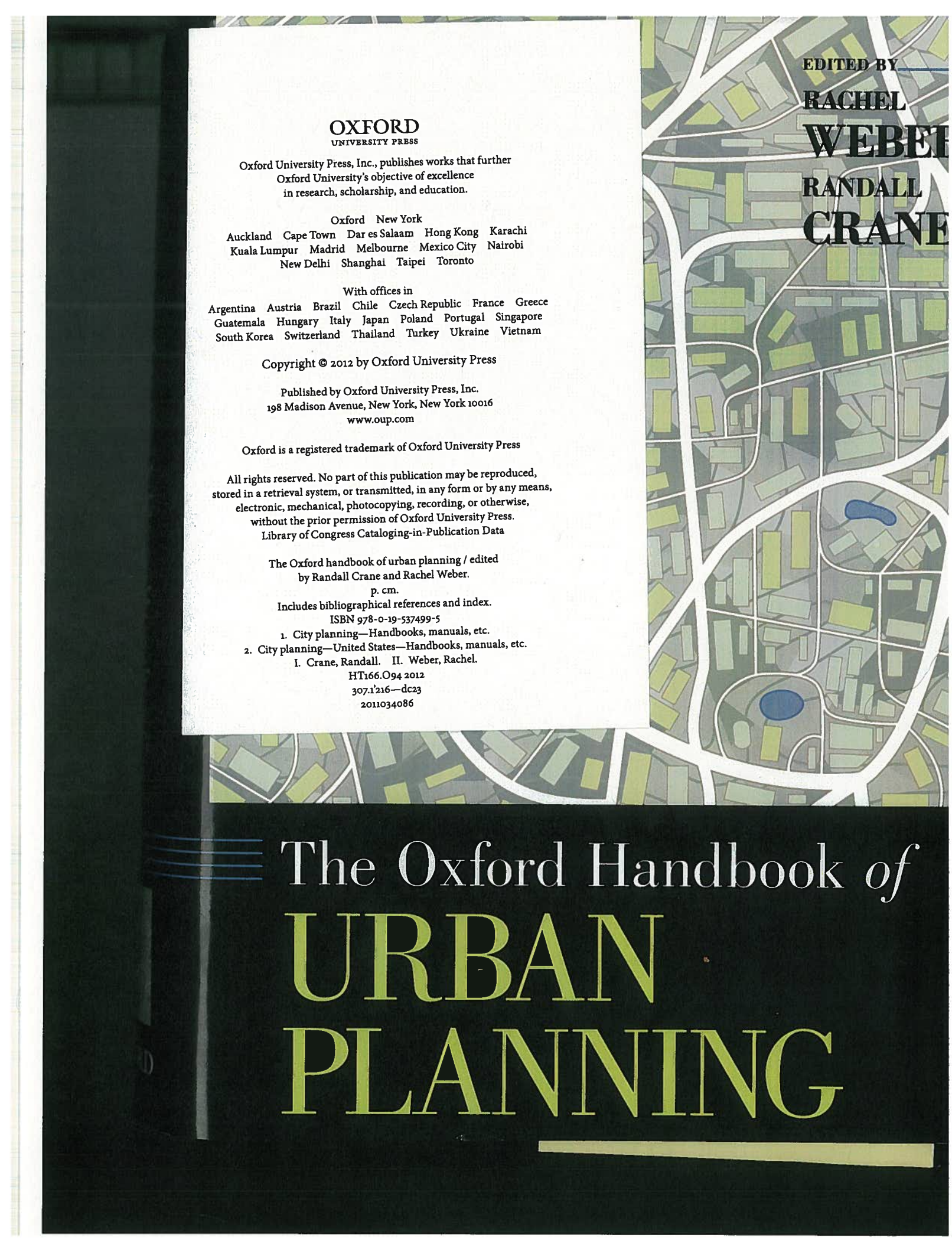

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CHAPTER 9

ACCESS

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1. INTRODUCTION

ANNUALLY, traffic-weary residents across the United States eagerly wait for the arrival of their news source to learn about the latest congestion report card from the Texas Transportation Institute. This Urban Mobility Report makes headlines, especially in places with worsening congestion. Even smaller areas, possibly not yet victims what some might consider serious traffic, lament their annual increase in levels of congestion, yet secretly enjoy their emerging big-city status. Traffic engineers, planners, and politicians take more than feigned interest because, to date, such ratings are the only available measure to assess progress toward a concern central to livability that is front and center in the minds of many residents.

Traffic congestion is a serious issue, undoubtedly, particularly in major metropolitan areas worldwide. But is congestion the problem or the solution? Taylor (2003) argues that traffic congestion is a solution to the problem of how to allocate scarce road space. (In contrast, economists argue for road pricing to allocate road space, but clearly there are factors limiting its widespread deployment.) Even if we agree that congestion wastes time, is minimizing congestion the most appropriate public policy goal (Taylor 2003)? Do measures of congestion provide the basis for policy prescriptions? We argue elsewhere (Levinson and Krizek 2008) that mobility (or lack thereof because of inadequate networks or congestion) is an element of the larger goal—ensuring accessibility.

Recent years have witnessed more than a handful of conferences or workshops whose central themes focused on the concept of accessibility. For example, the University of Minnesota sponsored two conferences, producing an array of recent scholarly publications on the topic in 2004 (Levinson and Krizek 2005) and

2007 (Axhausen 2008; Bruegmann 2008; Crane 2008; Lo, Tang, and Wang 2008; Ottensmann and Lindsey 2008; Scott and Horner 2008); in 2007, the European Science Foundation hosted a workshop, How to Define and Measure Access and Need Satisfaction in Transport (Becker, Bohmer, and Gerike 2008). The Network on European Communications and Transport Activities Research (NECTAR) continues to sponsor activities focusing on accessibility. Accessibility has even been touted as a civil rights issue (Sanchez 1999).

As judged by the level of discussion, mention, and focus in specialized workshops, interest in accessibility is high. Previous writings have focused on defining the concept of accessibility generally, starting from Hansen (1959), but also involving other extensions (Dalvi 1979; Ingram 1971; Kau 1979; Rutherford 1979), measuring the concept using different approaches (Handy and Niemeier 1997), various data needs (Krizek 2008),[8] or its use in explaining behavior (Levinson and Krizek 2005; Levinson 1998).

This chapter recommends that policy decisions be based on important and reliable performance measures. Robust measures that simultaneously assess the performance of the transportation *and land use* dimensions of cities, however, are mostly missing from such discussions (Levinson 2003). At the heart of the proposed approach lies the concept of accessibility: the ability of people to reach the destinations that they need to visit in order to meet their needs. A focus on accessibility—rather than congestion or mobility— would produce a more complete and meaningful picture of metropolitan transport and land use.

This chapter aims to articulate a clear role for measures of metropolitan accessibility and to demonstrate the utility of these measures in informing and influencing policy. It reviews necessary definitions, comments on the nature of past research, and suggests strategies to adapt such research into means. It endeavors to place accessibility in a position of prominence as a performance measure; thus, this chapter has four parts and functions, as follows:

- To describe the use and measurement of accessibility for metropolitan areas,
- To appraise the current state of knowledge and literature,
- To identify issues about measurement,
- To offer prescriptions for resolving those issues, given political contexts, and
- To point to future directions.

2. DEFINITIONS

Accessibility has been a familiar concept in the transportation planning field since the 1950s, when it was defined as the ease of reaching desirable destinations

(Hansen 1959). What has been widely labeled as the "Hansen measure" represented one of the first efforts by planners to develop measures that linked land use and activity systems with the transportation networks serving them. Hansen presented a hypothetical model showing how differences in accessibility—constructing an express highway—could be used as the basis for a residential land-use model. In this context and others (Patton and Clark 1970), highways (and other transportation infrastructure) provide accessibility that affect location decisions.

In these applications, accessibility weights opportunities (e.g., the quantity of an activity as measured by employment) by impedance (e.g., a function of travel time or cost). Within this framework, accessibility is typically described by the following equation:

$$A_i = \sum_{j-1}^{n} O_j f\left(C_{ij}\right)$$

where A_i = accessibility from a zone (i) to the considered type of opportunities (j)
O_j = opportunities of the considered type in zone j (e.g., employment, shopping, etc.)
C_{ij} = generalized (or real) time or cost from i to j
$f(C_{ij})$ = Impedance function (exponential or power functions are most often used)

Accessibility applies within cities and between cities. The matrix depicted in table 9.1 suggests one organizational schema. Most focus in the planning community has been on access for passengers to various daily activities. But access from a city to other cities is important in explaining the growth of areas as a whole; furthermore, industry depends on easy access to goods both within the metropolitan area (to distribute to customers and suppliers) and to other cities.

New modes of transportation change each city's relative (and absolute) positioning for each type of accessibility, and this in turn helps drive the rise and fall of cities. Cities built in earlier times that could not, or did not, adapt to new modes fell by the wayside; cities that were well located in one era may be redundant in another,

Table 9.1 Matrix of Accessibility

	Intra-metropolitan					Inter-metropolitan
Passenger		Car	Bus	Bike	...	Walk	
	Jobs						
	Stores						
	...						
	Workers						
Freight							

faster era when primary cities need not be so close. The same applies within cities, and as intrametropolitan transportation modes change, neighborhoods that were once exclusive or attractive lose their relative advantage, and new developments rise in their wake.

Accessibility's identifying characteristic, the *ease of reaching destinations*, is often considered a suitable definition and contains two important tenets. There is the land-use side of the coin—the desirability of what can be reached—and there is the transportation side, or by what mode and how fast. The term *accessibility* is often countered with the term *mobility*, often defined as the "ease of movement."

Such benefits are perhaps best illustrated through examples. Imagine traveling to (or through) the prairie province of Manitoba in Canada. The traveler meets with the basic services required for daily living (i.e., food stores, shelter, employment opportunities); these services are mostly distributed across the landscape in a manner befitting relatively low density development. The result is an environment with relatively limited services but also (usually) free-flowing traffic. Traffic congestion fails to exist, and when the roads are free of snow and mud, levels of mobility are quite high. People can get what they need, assuming auto-based travel, but the array of choices of things to get is relatively limited, so they are less likely to get what they want.

Contrast the above situation with the island of Manhattan in New York City. Often thought of as the congested heart of the largest city in the United States, its overall attraction, both culturally and economically, suffers little nonetheless. The reason is relatively simple. An endless array of services and opportunities exist for consumption, accompanied by several options as available transportation modes. Despite its high levels of congestion, New York City thrives because of the extreme ease with which it enables residents and visitors to reach varied and valuable destinations.

The above exemplifies how nearby destinations produce high accessibility even with low mobility. Conversely, where origins and destinations are spread broadly, even great mobility does not ensure high accessibility. The two concepts can be readily distinguished through an understanding of the meaning of a change in each: an improvement in mobility reduces the time-plus-money cost of travel per mile, while an improvement in accessibility reduces the time-plus-money cost per (value of) destination. Land is more expensive in Manhattan than Manitoba, suggesting the market values accessibility more than mobility.

3. Appraisal

The above concepts appear straightforward—and they are from the bird's-eye perspective. More than a half-century's worth of study on related issues provides

a solid foundation to understand some inherent interactions between land use and transportation. Measures of accessibility have historically subscribed to one of three categories: gravity-based measures, cumulative opportunity measures, and behavioral measures (Handy and Niemeier 1997). Even some of the more advanced measures (Miller 1999) derive from these three categories.

However, an examination of the literature suggests that different aspects of how accessibility is measured (e.g., how to measure attributes, how to measure travel cost, how to value or weight for various considerations) are considerably more complicated. Below, we appraise a half-dozen key dimensions of past work for their usefulness in informing contemporary planning issues. Without being exhaustive, this list provides the reader with a starting point for wading through existing knowledge.

1. The concept of accessibility was initially developed for automobile travel. To the extent that accessibility has been employed in past mainstream transportation planning circles, such measures have also typically been auto based (Handy and Clifton 2001: Iacono, Krizek, and El-Geneidy 2009). The past decade has witnessed considerable attention on developing measures that more fully capture walking and transit (and sometimes even cycling), but these efforts are still in their infancy and where they are pursued, are usually conducted for limited geographic areas (e.g., a particular neighborhood or a corridor).
2. The overwhelming majority of studies focus on access to employment. The emphasis on employment accessibility is understandable, given its link to other important aspects of urban structure, such as choice of residential location and social exclusion (Preston and Rajé). However, access to other types of destinations, such as retail, are also important because they strongly influence various dimensions of travel behavior, such as trip frequency (Daly 1982), destination choice (Handy 1993), mode choice, and trip or tour complexity (Hanson and Schwab 1987). They also affect the price people will pay for land; areas with higher accessibility to desirable activities will be more expensive. The market (the collection of individual buyers and sellers) has an opinion on what is desirable, which can be ascertained through tools such as hedonic models for the price of real estate. Higher access levels to activities such as shopping and recreation are also thought to improve the general quality of life. Land price implicitly incorporates the value the market places on a variety of goods that may be available across a metropolitan area into a single measure of attractiveness, but also contains other factors. Decomposing this into its constituent elements is difficult. And, where nonemployment measures have been researched, their context has usually been limited to specialized purposes such as parks and schools.

3. There is an enormous difference in how things are measured for dimensions such as spatial separation between origins and destinations (e.g., crow flies versus network distance), travel time, and composite travel cost. For example, travel cost typically only considers either time or distance, but rarely money.
4. Measures of accessibility are almost always divorced from political realities. Different types of activities and services are associated with different sets of restrictions. Being located in a particular jurisdiction determines which government services one can legally access. Access to police, fire, and schools, for example, depends on jurisdictional residence. Other types of activities (jobs, shops) are open to the free market (at least within national borders), and while still subject to the capability (how far one can reach) and coupling (who one wants to reach it with) constraints of time geography (Hägerstrand 1970), are not as limited by authority constraints.
5. As with sprawl and smart growth, the language (and sometimes the literature) associated with accessibility often suffers, as not everyone employs the same dictionary; it can be confusing and pliable. For example, accessibility planning has traditionally focused on access to emergency services and/or to services for people with disabilities. Today it has expanded in scope to consider the impacts of limited access on outcomes, such as economic status, diet, social isolation, and health care. Rarely in colloquial settings does it resemble the definition we present above, and the terms are often adapted depending on one's purpose (the American Disabilities Act (ADA) is a classic example, suggesting that various destinations need to be accessible for a variety of users, but in the ADA sense accessibility refers to physical ability to enter, rather than geographically able to reach). That said, there is growing agreement among transportation scholars that accessibility refers specifically to the ability (can I get there from here?) or ease (how hard is it to get there from here?) of reaching destinations, while mobility simply represents the ease of moving on the network (Levinson and Krizek 2005). In that view, accessibility is about getting places and doing things, while mobility is just about the cost of travel.
6. Finally, despite the wealth of research and breadth of different ways of measuring different aspects, the culmination lacks a "unified theory" for measuring geographic accessibility; the accessibility we employ has been called Type 1 accessibility by Batty (2009), in contrast with Type 2 and Type 3 measures that concern the connectedness of physical infrastructure but not the value of the destinations. Despite a half-century of study, many of the above issues continue to get in way. These issues are further complicated by recent developments such as how to best account for the rapid increase in electronically mediated interaction, information and communication technology, and new "virtual" environments.

4. Implementation

While the concept of accessibility has received support among the academic community, its application as a planning concept has been less widespread, with just a few concrete examples to point to (Handy 2005). The reasons for limited use are myriad and not limited to the lack of: (a) consensus on a preferred and comprehensive measure (by purpose or by mode); (b) detailed, reliable and widely available travel or land use data (Krizek 2008); (c) consensus in understanding the different purposes for which the measures will be employed; and (d) relatively straightforward strategies for putting it all together. Below, we describe some of the difficulties, and based on experience developing robust and metropolitan-scale measures in the Minneapolis-St. Paul metropolitan area (El-Geneidy and Levinson 2007), prescribe strategies to address them.

To Where?

As mentioned, most measures of accessibility center on the ease of reaching employment. This is understandable given the prominent role economic activity plays in the health of cities. But in the spirit of quality of life, diversity of goods and services, and health, we see access to food, low-cost goods, parks and recreation, and medical care as important subjects to be measured (among others). Even nominally similar destinations may not be perceived equally; see Box 9.1 on Taste.

Box 9.1 Taste

Imagine a hypothetical residential neighborhood that has the following services all within 800 meters: deli, movie theatre, grocery store, veterinary, coffee shop, and a restaurant. According to most metrics of accessibility, such an environment would score exceptionally high; residents have a full array of opportunities all within convenient walking distance. Consistent with conventional theory, more places in the metropolitan area along the line of the above would be preferred over fewer places. (Too much choice may increase search and mental transaction costs however, and not be as desirable as a simple "more is better" rule would suggest, e. g., see Barry Schwartz's *Paradox of Choice*). Overall the market is likely to score a place with more access higher, (with concomitant higher rents), though for any individual, their preference structure values proximity to some different mix of destinations. Sometimes these individual-level constraints require accounting for consumer tastes. For example, most people seek access to a grocery store, but for some people that means finding the closest location for milk, while for others only a gourmet food store will suffice.

By What Mode?

Broadening the scope of accessibility to include additional types of destinations and active transportation modes such as walking and cycling has been proposed as an objective worthy of further study in the land-use transportation field (Handy and Clifton 2001; Handy 1993). Other than Iacono, Krizek, and El-Geneidy (2009), to date there have been few examples computing nonmotorized accessibility measures for entire metropolitan areas (as opposed to smaller neighborhoods). Issues including, but certainly not limited to, lack of reliable data, computational power, and knowledge of nonmotorized travel behavior have prevented widespread application of such measures.

Using Which Function?

At least three general functions have been extensively employed in past efforts. These include the cumulative opportunities function, the traditional Hansen function, and the log-sum function.

Despite their historic popularity, attraction-accessibility measures have some significant weaknesses. These measures assume that the ordering of alternatives is irrelevant to the individual; this is clearly not the case when individuals have less than complete knowledge and must acquire information through a search process. Attraction-accessibility measures also deny the possibility of a hierarchical decision process where individuals mentally cluster individual choices into aggregates (e.g., making a choice between downtown versus suburban shopping malls prior to choosing individual stores). Finally, attraction-accessibility measures can be difficult to interpret. For example, researchers often interpret the Hansen measure as a gauge of "potential interaction"; however, it is unclear exactly what this means beyond simple ordinal relationships (e.g., "A has more potential interaction than B"; Miller 1999). We do not know whether (or under what conditions) there are increasing or decreasing returns to accessibility. We imagine one is better than zero, or two is better than one, but is access to three almost identical stores significantly more valuable than two? The increment in value might be diminishing at some point.

5. Policy

Having discussed some important theoretical underpinnings and outstanding intellectual issues in measuring accessibility, we turn to describing how accessibility measures can best inform and influence policy in metropolitan areas.

In community planning initiatives, the goal of enhanced accessibility has generally garnered a welcome seat at the table (Handy 2005), alongside a laundry list of aspirations and platitudes, such as increased mobility, decreased congestion, and reduced greenhouse gas emissions.

However, despite a seeming consensus among land-use transportation scholars and practitioners about the merits of accessibility as a performance measurement tool, the concept has not yet been widely adopted. A fundamental issue is that accessibility measures come in all different shapes and sizes. Some are more theoretical and robust in their complexity. Others are more practical and applicable with readily available data. The advantages of each depend on the intent and purpose. Furthermore, data requirements have been relatively burdensome, thereby rendering the concept difficult to effectively measure. Faster computational speeds and increasingly available land-use data that are both detailed and reliable, however, help relax these constraints. The current outstanding challenge when approaching such a goal in metropolitan and policy confines now centers on the type—and value—of measures that would be used.

We suggest that accessibility measures have enormous potential to provide an appropriate performance measurement tool to guide both physical changes, such as future land-use decisions and transportation investments, and policy changes, such as road pricing. But for such a measure to gain the currency it deserves in the policy process, it needs to be straightforward and appealing to users and politicians.

These stipulations require several criteria to be filled—criteria not unlike those described for measures of effectiveness in analyzing the goals or success of different policy initiatives (Levinson and Krizek 2008). Key to the particular pursuit of measuring and furthering accessibility is that the measures be clearly understood by both residents and policy decision makers. Toward this end, we suggest that five criteria be satisfied. We label these the "Five Cs" of effective accessibility measures, and each are briefly discussed as follows.

Cumulative—Accessibility measures need to scale well. They need to apply to a particular address, a neighborhood, or an entire region.

Comparable—Accessibility measures need to inform multiple modes on the same continuum and on the same scale. In other words, it is ideal to have the associated varying networks, varying travel speeds, and varying impedance functions be as consistent as possible. Comparing an accessibility measure for walking that focuses particular attention on experiential elements (e.g., urban design amenities) with an accessibility measure for auto based solely on travel time presents outstanding challenges.

Clear—For the measures to have appeal to various constituents, they need to be understood by them. They need to be transparent in terms of where the data came from, how they were calculated, and what they mean. Politicians and citizens have a hard time relating to phenomena such as log-sum measures or negative exponential distance decay curves.

Comprehensive—Accessibility measures need to be able to clearly capture just certain domains of interest—restaurants, for example—or be able to aggregate different types of land uses.

Calculable—It is best for measures to employ data that are readily accessible, available for an entire metropolitan area, and specific enough to capture the fine-grain calculations required for pedestrian travel.

The above criteria ultimately limit the utility of some of the more theoretical, nuanced, or even robust and extended measures that have appeared in the literature over the past decades. As much as researchers support continued exploration of how more complex measures could and should be applied to policy environments, there are competing demands—demands which often cannot be realized. Satisfying the above Five Cs of effective accessibility measures leads us to recommend the *cumulative opportunity* measures of accessibility.

Several advantages of this measure for this purpose stand out. It is a straightforward measure for people to understand; the number of destinations within a set amount of travel time is a concept most can relate to. It scales well; it can be used in a straightforward manner for a single point or an entire metropolitan area. It compares well; it can be used in the same manner to compare different modes, different neighborhoods, and even different metropolitan areas.

Of course, a number of definitional considerations still need to be fully ironed out. Even the most straightforward of measures can be made complicated by attending to all sorts of details. For example, how should destinations be measured (e.g., by establishment, employees, floor area, or something else)? How detailed should transit schedules be consulted (e.g., what time of day, how many transfers)? What time cut-off for waiting for transfers should be imposed (20 minutes, longer or shorter)? Should more than one time band be used?

A prescribed measure we endorse would be computed using a cumulative opportunity measure that: (a) uses 20 minutes as a baseline measure for comparative purposes; (b) is performed for specific subunits for a region (e.g., transportation analysis zones to measure auto accessibility, census blocks for other modes); (c) measures various types of destinations (e.g., jobs, retail, food, health care) independently or in an aggregated manner; and (d) does so using actual measures of the phenomena rather than modeled estimates.

Accessibility measures are typically thought of in terms of locational (*x-y*) attributes. Their value from a policy perspective, however, is when the measures are detailed in nature, but can be scaled up to represent broader areas using a weighted average for the area under inquiry. One could present a weighted accessibility score for a particular latitude and longitude location or a subarea (e.g., a transportation analysis zone, or block) or an accessibility measure for an entire neighborhood, community or even metropolitan area using the following equation:

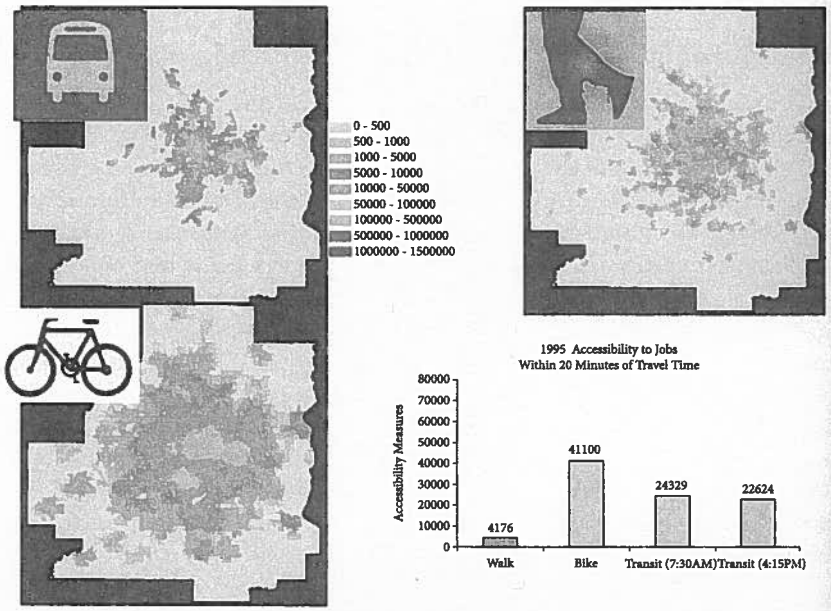
$$A_{area} = \left(\sum A_{sub\text{-}area} * P_{sub\text{-}area}\right) / P_{area}$$

A = Accessibility Measure (for a particular area such as a neighborhood, district or even metropolitan area)
P = Weight (e.g., population of the disaggregate unit area)

Figures 9.1, 9.2, and 9.3 illustrate the accessibility to jobs by walking, bicycling, and transit for 1995, 2000, and 2005, respectively, in the Twin Cities Metropolitan Area (Minnesota). The bar charts, compiled using the above equation, parsimoniously depict the number of jobs that can be reached in 20 minutes of travel time by each mode. As can be seen, walking is slower than biking or transit, and thus has overall a lower level of accessibility. Over time accessibility is increasing, primarily because of the redistribution and growth of land use, and in part because of changes to the transportation network. The visual map depiction combined with the bar chart—which could be computed for any geographic area—provide a clear, useful, and robust story for accessibility in the region that planners, high level policy analysts and decision makers can easily relate to.

6. Directions

For many years, normative work looking at cities and transportation has focused on strategies to modify transportation phenomena or behavior: how to encourage



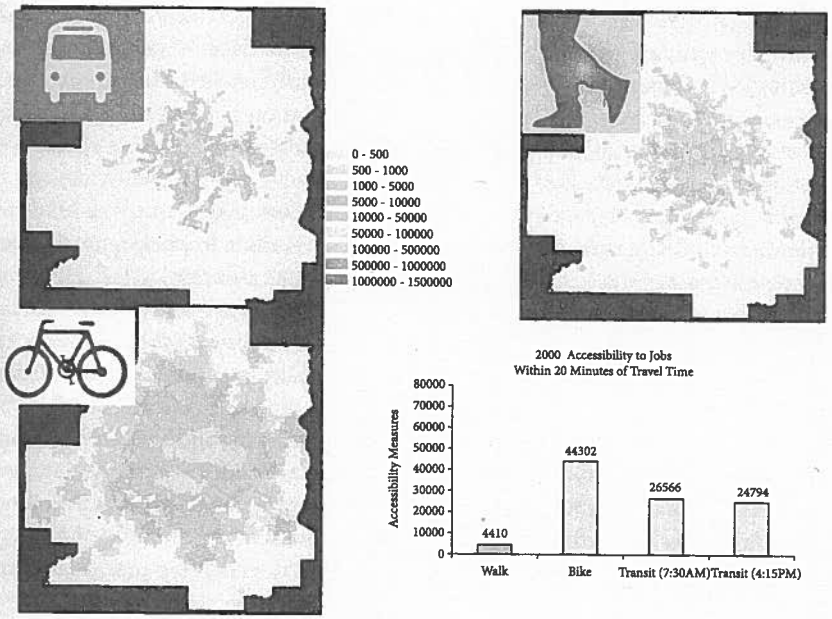


Figure 9.2 2000 Total Employment.

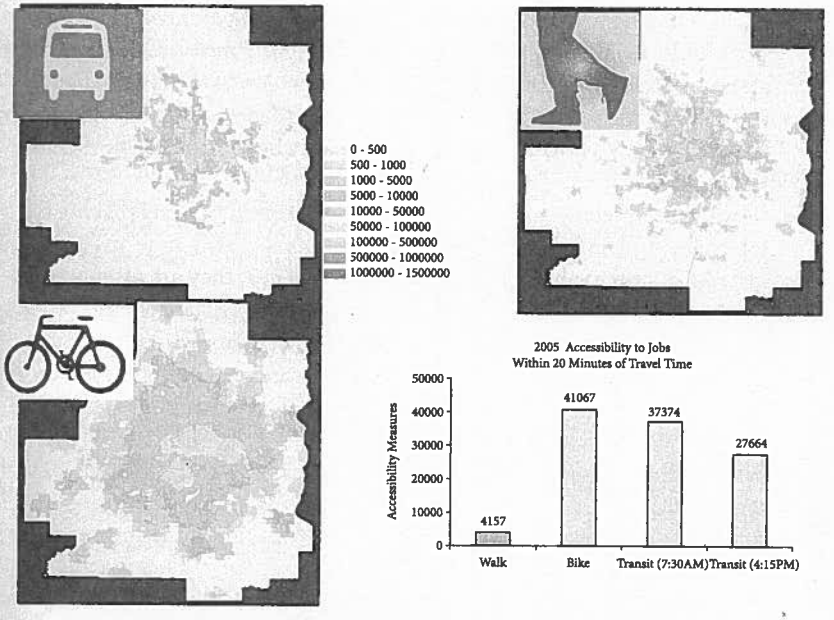


Figure 9.3 2005 Total Employment.

residents to drive less, use transit more, or spur walking. (In contrast with mid-twentieth century policy, which favored more driving and less transit, and spurned walking). These normative strategies are often pursued outside of an appreciation of the policies and economic forces that have shaped these behaviors. Furthermore, the ways of thinking about policy prescriptions are bereft of appropriate measurement methods or standards.

For example, considerable research seeks improved models of travel behavior. This research furthermore tries to draw close associations to environmental outcomes; alternatively, research might seek to put more accurate dollar figures on various intangibles, and so on. The intent is that such research will enhance policymaking. Implicit in this line of reasoning is that a shortcoming of past transportation policies was primarily attributable to a lack of accuracy in this kind of knowledge. By reducing uncertainty in these areas, it is thought, more effective policies could be uncovered. But weaknesses in the policies may derive from sources other than gaps in predicted outcomes. One major weakness in current policy is a misdefinition of the problem as one aims to maximize mobility rather than maximize accessibility.

This chapter recommends that problem definitions can be reformed to bring them in line with current transportation goals (and thus develop metrics that are closer to measures of benefits identified in economic theory, which are often too idealized to realize) and also identifies several important issues.

The concept of accessibility operationalized using cumulative opportunities measures offers a compelling, attractive and alternative basis for policies related to the built environment. Such measures are:

- Easily scaled to be regional in scope. A shortcoming of much of the past work at the neighborhood scale is that accessibility measures, while robust and sometimes detailed, cannot be easily scaled up to the regional level.
- Inclusive as desired. Depending on local data sources (most of which are rich and widely available), measures can easily be as inclusive or exclusive as need be.
- Readily interpreted. Accessibility is rarely presented in units that are easily interpreted. Measures rarely have any absolute meaning in terms of costs or benefits or other values such as convenience. Thus, they are often normalized over a certain range and interpreted in purely relative terms (Batty 2009). Relativity helps users grasp differences between various places or neighborhoods, but many are yearning for a concrete unit of measurement. Cumulative opportunities measures rectify this problem.

In this application we view the process of developing consistent accessibility measures for both motorized and nonmotorized (active transportation) modes as both an accomplishment and an invitation for future work by both practitioners and academics.

There remain many questions that do not have satisfactory answers. Does accessibility have increasing or diminishing returns? How do different people

value different types of accessibility? Accessibility as a property of location can be capitalized in land value. Many hedonic models of real estate aim to disentangle locational attributes from structural attributes, but most use crude, and incomplete, measures of accessibility when doing so. Distance to CBD is a useful surrogate, but is insufficient as an accessibility measure. We lack experience of implementing decision criteria dominated by accessibility (e.g., how different proposed transportation projects rank by their accessibility contribution), so have yet to see how political realities confront this posited decision tool for investment. We do not know how well accessibility describes the economies of agglomeration that make cities valuable, but with a comparison of metropolitan economic product and metropolitan accessibility, we may be able to discover the macroeconomic value of metropolitan organization.

The late Mel Webber of the University of California, Berkeley, often asserted that the ideal city is "one that maximizes access among its interdependent residents and establishments." This chapter aimed to crystallize metrics to sufficiently capture the degree to which Mel Webber's ideal city is achieved. The bottom line is that accessibility measures help planners and others better differentiate between policy variables they can control—such as trip cost or development approvals—and how individual travelers weigh and select among destinations (which planners can do little to control). Implementation of this framework would, at a minimum, permit a more straightforward comparison of access in different communities, in a given community over time, or across alternative future scenarios. A more standardized definition of what to measure is thus valuable.

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CHAPTER 10

PRESERVATION

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1. INTRODUCTION

THE twentieth century witnessed historic preservation expanding from a handful of scattered efforts to salvage elite houses to an organized social movement. For instance, the restoration of Colonial Williamsburg, Virginia, in the 1930s required the cooperation of a federal agency, the National Park Service, with civilian expertise across various disciplines, such as architecture, history, landscape architecture, historic archaeology, and planning. The preservation of Charleston, South Carolina, resulted from the first zoning ordinance for historic preservation in the United States. These sorts of interdisciplinary efforts allowed preservation to tap into the cultural politics of governmental and private civic organizations. They have achieved admirable progress as "one of the broadest and longest-lasting land-use reform efforts" (Page and Mason 2004, 3), although they have typically been considered separate from much of the "bread and butter" of planning, such as zoning and other land-use regulation. The practice of historic preservation in the United States extends back to the nineteenth century, but it gained official recognition as a field in the 1960s, arguably when the National Historic Preservation Act was passed in 1966. In recent years, preservation planning has moved from a staid, traditionalist field toward an emerging practice that embraces, we argue, a subtly revolutionary approach that encourages an appreciation of the shared, diverse, conflicting, and emotional characters of landscapes.

To achieve this momentum preservation planning's domain of interest has shifted from individual structures to wider landscapes, neighborhoods, and sites of production, with greater emphasis on public participation. Actors of