

PLANNING CITIES FOR THE OTHER PERCENT OF THE RESIDENTS:
IMPACTS ON THE ELDERLY AND DISABLED COMMUNITY

by

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Presented to the Faculty of the Graduate School of
The University of Texas at Arlington in Partial Fulfillment
of the Requirements
for the Degree of

MASTER OF CITY AND REGIONAL PLANNING

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2006

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ACKNOWLEDGEMENTS

The author wishes to thank her parents, family and friends for their love and support during this long journey.

April 18, 2006

ABSTRACT

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Publication No. _____

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The urban environment has evolved in the time since the Second World War. Advances in technology have been a catalyst for numerous urban problems; urban sprawl, poverty and a shortage of low to moderate-income housing, for example. When addressing these issues, city planners often neglect the needs of the disabled community. This is cause for concern because society is aging and due to advancements in medicine, the disabled population is growing exponentially.

The focus of this thesis is the roll urban design and city planning has in the issues that plague the disabled community by examining both physical design and the policies that affect their social interaction and status. Furthermore, a study of how this

information can be used to create better standards and policies to prevent a crisis in the future.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	iii
ABSTRACT	iv
LIST OF FIGURES	vii
LIST OF TABLES.....	viii
Chapter	
1 INTRODUCTION.....	1
2 THE HISTORY OF URBAN FORM	7
3 LAWS AND REGULATIONS IN ACTED TO PROTECT THE DISABLED	11
4 MODEL OF ACCESSIBILITY	17
5 ROOM TO IMPROVE: INACCESSIBLE CITIES.....	22
6 CONCLUSION: HOW CAN WE IMPROVE?	26
REFERENCES	32
BIOGRAPHICAL INFORMATION.....	35

LIST OF FIGURES

Figure	Page
1.1 Percentage of the Civilian Non-institutionalized Population with a Disability by Age and Type of Disability: 2000	3
5.1 Springfield Missouri Zoning Map	23

LIST OF TABLES

Table	Page
1.1 Percent of SSI Benefits Needed to Rent a One Bed-Bedroom Housing Unit.....	4
3.1 State Accessablity Codes.....	14
6.1 FHA Guildlines	29

CHAPTER 1

INTRODUCTION

Over the past few decades, the urban environment has evolved due to technological advances and changes in social structure. With each technological advance comes a new set of issues that have a profound effect on the urban environment; the advent of the automobile, for example. The urban environment went through and continues to go through changes that have affected society both negatively and positively. The automobile gave the upper class and middle class the opportunity to move outside the city to the suburbs, which, overtime, forced companies to move their operations to industrial parks in the suburbs to make it more convenient for the highest concentration of people.

Because of this shift from the inner city to the suburbs, the residents of the inner cities experienced a decrease in the number of good paying jobs and decent housing in addition to an increase in crime and poverty. When city planners and urban designers discuss how to remedy the issues facing our nation's cities and minority groups, there is a focus on race, sex, cultural background, and socioeconomic status. Minority issues are just one facet of planning and the study of urban problems.

One group is often overlooked when making decisions that affect the design of the urban environment. The disabled community is one group that is often not mentioned when discussing issues like gentrification, homelessness, transportation

issues, homeownership, and unemployment. This is cause for concern because the disabled community is a minority group that does not discriminate; anyone can become a member at anytime, no matter whom they are or what background they come from. This is important because, due to advancements in medicine and technology, people are able to live longer, lives that are more active. A direct result is that the disabled population is growing exponentially.

In order to fully understand the scope of the problem, a definition of disabled is required. The U.S. Census defines someone as disabled if they fit into one or more of the following groups:

- They were aged five or older and responded “yes” to a sensory, physical, mental, or self-care disability.
- They were aged 16 years or older and responded “yes” to disability affecting going outside the home.
- They were between the ages of 16 and 64 and responded “yes” to an employment disability.¹

The 2000 census showed a pattern of the rate of disability increasing with age.²

¹ Waldrop, Judith. Sharon M Stern. Disability Status: 2000. United States Bureau of the Census. March 2003. 3 March 2006 <http://www.census.gov/prod/2003pubs/c2kbr-17.pdf>.

² Waldrop, Judith. Sharon M Stern. Disability Status: 2000. United States Bureau of the Census. March 2003. 3 March 2006 <http://www.census.gov/prod/2003pubs/c2kbr-17.pdf>.

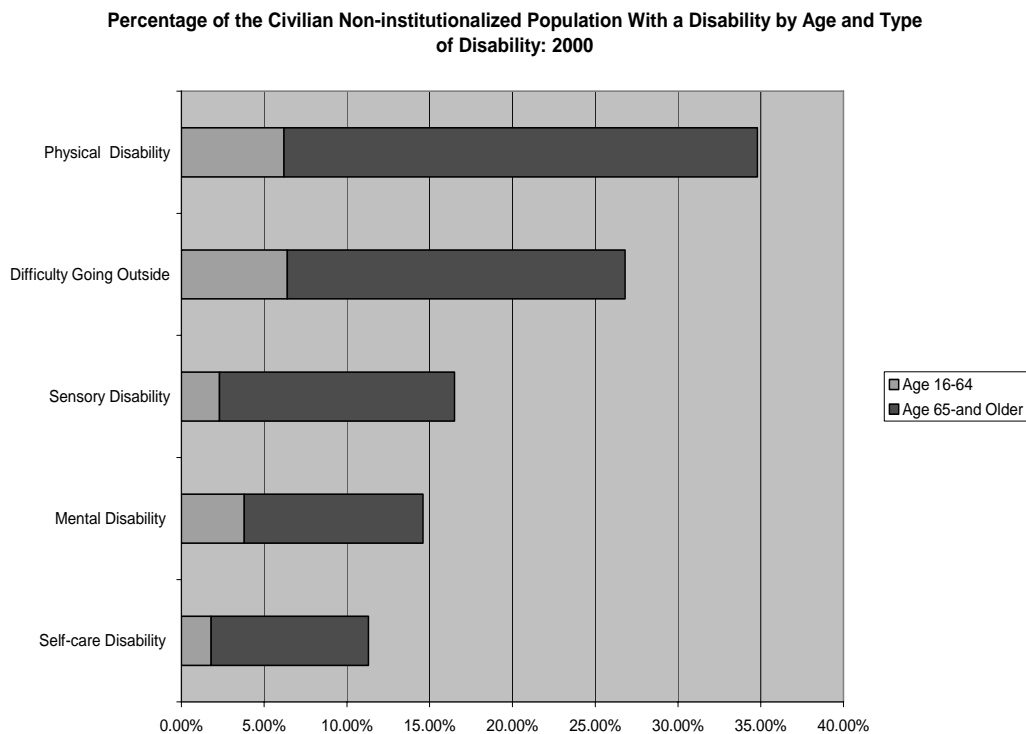


Figure 1.1 Source: U.S. Census Bureau 2000

This statistic, however, only takes into account those who fall under the legal definition of disabled; there are those who are disabled temporarily making the numbers deceiving and perhaps triggering some to view accessibility as an unimportant issue. This is cause for concern because in two-thousand and five, about 30% of the disabled population was living at or below the poverty line, compared to 8.3% of people without a disability;³ this can be directly linked to a view of disability as unimportant. Therefore, disabled people are more likely to be homeless, or will have difficulty finding housing that not only fits their economic needs, but also their physical needs.

³ Children with Disabilities. 2005. 11 June 2005 <http://library.adoption.com/Special-Needs/Children-with-Disabilities/article/3940/3.htm>.

Table 1.1 Source: Priced Out in 2002

Percent of SSI Benefits Needed to Rent a One Bed-Bedroom Housing Unit					
State	2002 Average	State	2002 Average	State	2002 Average
Alabama	78.10%	Kentucky	73.40%	North Dakota	73.60%
Alaska	72.80%	Louisiana	79.00%	Ohio	88.70%
Arizona	108.60%	Maine	90.10%	Oklahoma	67.10%
Arkansas	68.60%	Maryland	134.50%	Oregon	99.60%
California	113.40%	Massachusetts	134.70%	Pennsylvania	95.70%
Colorado	109.20%	Michigan	97.90%	Rhode Island	93.20%
Connecticut	97.80%	Minnesota	95.50%	South Carolina	86.10%
Delaware	111.10%	Mississippi	70.80%	South Dakota	76.60%
District of Columbia	180.60%	Missouri	82.90%	Tennessee	80.80%
Florida	108.80%	Montana	73.30%	Texas	98.30%
Georgia	112.10%	Nebraska	75.20%	Utah	99.20%
Hawaii	133.80%	Nevada	122.00%	Vermont	91.00%
Idaho	68.30%	New Hampshire	113.40%	Virginia	116.80%
Illinois	122.10%	New Jersey	141.90%	Washington	107.40%
Indiana	83.50%	New Mexico	84.80%	West Virginia	69.40%
Iowa	75.90%	New York	129.30%	Wisconsin	75.40%
Kansas	80.00%	North Carolina	93.50%	Wyoming	73.50%
National Average					105.50%

Secondly, the current housing system does not meet the demand, or the economic needs of the citizens. In many states, low-income residents can't afford a basic one-bedroom apartment which has forced people to move into substandard housing until their name is selected for a government-subsidized apartment. Alternatively, some families are forced to put their loved ones into residential care facilities⁴ because the government will pay for lifetime care it is difficult to find government-subsidized in-home care⁵. This led to a new issue; some disabled people have decided to forgo the headache of trying to locate affordable safe government-subsidized housing for personal homeownership, through one the government-subsidized homeownership programs. Such as FHA, Freddie Mac, VA, or of the numerous state and community homeownership programs, this is thought to eliminate a lot of the worry. Unfortunately, many families face a new set of problems when planning to purchase a home. Many of these programs require clients to apply for these programs through an authorized lender. Many banks will not loan money to people on disability and there is the issue of accessibility. Accessibility is not required in residential construction, so it is up to the homeowner to make the necessary accommodations, which can be a very expensive process. This harsh reality has led to an additional burden of paying for residential care for a disabled family member to compensate for what the government cannot provide, leading to a homeownership rate of fewer than ten percent among the disabled population compared to seventy-one

⁴ Shapiro, Joe. (2002, Aug. 6). Liberty for the Disabled. NPR News. Retrieved Jan. 2, 2006 from the World Wide Web <http://www.npr.org/news/specials/housingfirst/nprstories/020806.kansas/>

⁵ Shapiro, Joe. (2002, Aug. 6). Liberty for the Disabled. NPR News. Retrieved Jan. 2, 2006 from the World Wide Web <http://www.npr.org/news/specials/housingfirst/nprstories/020806.kansas/>

percent among those without a disability.⁶

Homeownership is just one of the many obstacles the disabled community faces when trying to be productive members of their communities. People with disabilities continue to face issues with accessibility, even after laws like the Architectural Barriers Act of 1968 and the Americans with Disabilities Act of 1990 were enacted. Many cities still do not offer public transit this affects a disabled individual's ability to work and be independent.⁷ In addition, the overall design of some metropolitan areas determines how accessible they are. The way a city is zoned and the structure of the pedestrian routes can affect the accessibility of the city. Furthermore, the structure of government programs often becomes an additional roadblock to those that want to make their cities better for the disabled and elderly.

When all of these issues are evaluated, urban planners, designers, politicians and citizens should be concerned about the current state of our nation's cities, concerning the disabled. With the programs that have been developed and with the legislation that has been passed, people with physical impairments continue to have difficulty participating in day-to-day life.

⁶ Bush, President George W. (2003, April 29). A Progress Report on Fulfilling America's Promise to Americans with Disabilities. The White House. March 7, 2006. <http://www.whitehouse.gov/infocus/newfreedom/summary.html>.

⁷ Bush, President George W. A Progress Report on Fulfilling America's Promise to Americans with Disabilities. The White House. 29, April 2003. 7, March 2006. <http://www.whitehouse.gov/infocus/newfreedom/summary.html>.

CHAPTER 2

THE HISTORY OF URBAN FORM

In order to understand the present state of our nation's cities, it is necessary to examine the past. The development of urban areas is an evolutionary process. History has shown that development of the urban form is determined by natural and man made determinants. The location and development of some of the earliest known cities was the result of necessity. The location of early cities was often determined by climate, topography their proximity to food, and water and other amenities. In addition, to natural determinants, cities are also impacted by man-made determinants such as economy, politics, the urban grid and mobility.⁸ Modern cities developed in much the same way. Cities in the United States were impacted more by man-made determinants than natural ones, because due to advancements in technology.

Over the past two-hundred years, America's cities have gone an evolutionary process as a result of technological advancements. When urbanization first began in the United States, it was as the result of a surge in population due to immigration. After this sudden surge of immigrants, urban settlements started down a path of urban growth that was the result of the industrial revolution.⁹ It caused the first shift in the urban fabric by mechanizing agriculture, forcing those that worked in agriculture to find new jobs in

⁸ Morris, A.E.J. History of Urban Form Before the Industrial Revolutions. 3rd ed. England: Prentice Hall. 1994. Page 11-15.

⁹ Levy, John M. Contemporary Urban Planning. 7th ed. New Jersey. Prentice Hall. 2006. Page 9.

other areas including manufacturing.¹⁰ There was advancement in technology, therefore improving manufacturing, which would affect the urban environment from the late eighteen hundreds to present day. Advancements in transportation technology would leave the greatest impression on the structure of the urban and suburban culture throughout this nation's history.

In the beginning, it was steam ships and the railroad, followed by the streetcar. This allowed people to move out of cities that were riddled with disease overcrowding and despair.¹¹ The streetcar set the foundation for what would eventually be known as urban sprawl. The automobile would become the driving force for the decentralization of cities. Speed and flexibility were preconditions for widespread suburbanization.¹² Automobiles offered mobility they allowed retailers the ability to expand operations and follow their customers, and manufacturers to locate near their employees.¹³ In addition, advancements in communication technology made possible some decentralization of economic activity by reducing the need for face-to-face contact.¹⁴ This continued until World War II, when development all but halted during wartime. After the war ended, the United States went through a dramatic transformation with advancements in mobility by highway projects which made outward movement to the suburbs practical.¹⁵ Along with greater mobility, suburbanites were able to take advantage of numerous government programs that were intended to help families, specifically families of war veterans, to achieve, "the American Dream." A sense of security garnered from life in

¹⁰ Levy, John M. Contemporary Urban Planning. 7th ed. New Jersey. Prentice Hall. 2006. Page 9.

¹¹ Levy, John M. Contemporary Urban Planning. 7th ed. New Jersey. Prentice Hall. 2006. Page 10-14.

¹² Levy, John M. Contemporary Urban Planning. 7th ed. New Jersey. Prentice Hall. 2006. Page 17.

¹³ Levy, John M. Contemporary Urban Planning. 7th ed. New Jersey. Prentice Hall. 2006. Page 18.

the suburbs gave couples a good foundation for starting families, thus began the baby boom a phenomenon that began in the late 1940s, peaked in the late 1950's, and lasted into the mid-1960s further fueling the suburban housing boom.¹⁶ This would begin a “rippling effect” that would be felt until present day.

The “rippling effect” continued but in a new form. The shift was now from the Midwestern states to the Sunbelt. This created a gap in our culture that is widens each time a factory closes in a small town, and moves to a Sunbelt town or to a suburban industrial park. Residents move and precious jobs are lost, Center cities were all but abandon, with the exception of minorities and low-income families. The decentralization and relocation of major places of employment continues today. This has created center cities with high concentrations of poverty, crime, and blight, and sprawling suburbs connected by thousands of feet of highways.

This issue has caused urban planners, designers and lawmakers to make remedying blight and poverty their mission. When discussing these issues lawmakers focus on the obvious minority groups. Unfortunately, the disabled community often goes unnoticed the truth is that the largest percentage of this nations poor is the disabled.¹⁷ Additionally, those on Social Security Income (SSI) are less likely to own a home and are more likely to be priced out of an apartment. An average person on SSI receives a six percent cost of living increase per year, and the national average increase

¹⁴ Levy, John M. Contemporary Urban Planning. 7th ed. New Jersey. Prentice Hall. 2006. Page 18.

¹⁵ Hartshorn, Truman A. Interpreting the City: As Urban Geography. 2nd ed. New York. John Wiley & Sons Inc. 1992. Page 305.

¹⁶ O'Hara, Ann. Emily Cooper. Priced Out in 2002. May. 2003. 2 Jan. 2006. <http://www.c-c d.org/PO2002.pdf>.

¹⁷ O'Hara, Ann. Emily Cooper. Priced Out in 2002. May. 2003. 2 Jan. 2006. <http://www.c-c d.org/PO2002.pdf>.

in rent for a one bedroom affordable apartment is fifteen and a half percent.¹⁸

This has created a new urban problem for city planners, architects, and lawmakers at all levels of government. The need for integration of handicap accessibility in the urban environment has been the catalyst for the creation of numerous new building codes and laws in an attempt to create a barrier free society.

¹⁸ O'Hara, Ann. Emily Cooper. Priced Out in 2002. May. 2003. 2 Jan. 2006. <http://www.c-c d.org/PO2002.pdf>.

CHAPTER 3

LAWS AND REGULATIONS IN ACTED TO PROTECT THE DISABLED

Since the late sixties and early seventies, there has been a trend toward making the urban environment barrier free to the disabled community. This has led to many amendments and versions of laws each with a different intent and background.

The Architectural Barriers Act of 1969 (ABA) was one of the first accessibility laws that was created after the Vietnam War to create better access for the disabled veterans coming back from the war. The Architectural Barriers Act provided that:

All locations that are designed, constructed, altered, or leased by or on behalf of the government and certain other facilities that are financed with federal funds must comply with the architectural barriers act of 1968. Under the ABA, for federal agencies set standards the Departments of housing; Department of Defense such requirements for Defense facilities; US Postal Service sets requirements for postal facilities: and General Services Administration (GSA) sets requirements for all other facilities that fall under the act.¹⁹

Since November 15, 1984 the standard used by the Departments of Housing, Department of Defense, US Postal Service, and General Services Administration used the UFAS for design construction and alterations of their facilities.

Fair Housing Amendments Act of 1988 (FHAA)

Applies to multifamily projects made up of four or more dwelling units must be accessible the public areas and adaptable and dwelling units based on the Fair Housing Accessibility Guidelines (See Table 6.1).

¹⁹ Hoke, John Ray. Eds. Architectural Graphic Standards, 9th ed. New York: John Wiley & Sons Inc. 1994. Page 8.

The Rehabilitation Act of 1973 (Section 504)

States that program or activities that are supported by federal funds may not discriminate based on disability when providing benefits and services. All new construction and alteration projects must be accessible and comply with 504 regulations, UFAS is the guiding standard. Anyone not complying with section 504 faces the loss of federal funds.²⁰

The Uniform Federal Accessibility Standards (UFAS)

Applies to projects commissioned by the government, projects funded by federal funds. The UFAS based on the 1980 version of the ANSI standard;²¹ the accessibility standard that applies to the construction and alteration of all federal buildings, most federally funded projects, and those of most programs and activities that receive Federal financial assistance. UFAS may also be used by state and local governments under the ADA for facilities and then transit facilities, which must follow ADAAG.²²

Accessibility Guidelines for Buildings and Facilities (ADAAG)

Standards for accessible design apply to new construction and alteration projects (including historic properties) of public accommodations and commercial facilities under title III of ADA. Under title II of ADAAG is the standard for design, construction, and alteration of transportation facilities of state and local government into teas. In state and local governments may choose to use ADAAG (without the elevator exemption) or UFAS for other buildings and facilities.²³

Americans with Disabilities Act of 1990 (ADA)

The ADA makes it a civil rights and violation to fail to provide barrier free access in state and local government projects and commercial facilities and public accommodations by private entities, and telecommunications. Title II of the ADA applies to state and local accommodations and commercial facilities. The US Department Of Justices Regulations under Titles II and III and be Department of Transportation's (DOT) regulations under title II establish

²⁰ Hoke, John Ray. Eds. Architectural Graphic Standards. 9th ed. New York: John Wiley & Sons Inc. 1994. Page 8.

²¹ Harmon, Sharon Koomen. Kennon, Katherine E. The Codes Guidebook for Interiors. 2nd. New York: John Wiley & Sons Inc. 2001. Page 18.

²² Hoke, John Ray. Eds. Architectural Graphic Standards. 9th ed. New York: John Wiley & Sons Inc. 1994. Page 8.

²³ Hoke, John Ray. Eds. Architectural Graphic Standards. 9th ed. New York: John Wiley & Sons Inc. 1994. Page 8.

standards for accessible design that apply to public accommodations and commercial facilities are ADA accessibility guidelines for Buildings and Facilities (ADAAG) under Title II, state and local governments must use DOT's regulations which include ADAAG with section 10 transportation facilities. For other facilities of, entities may choose between ADAAG (without the elevator exemption) and Uniform Federal Accessibility Standards (UFAS) for facilities.²⁴

American International Standard Institute (ANSI)

ANSI A 117.1 was one of the first standards for providing guidance for barrier free design, and it has been the standard for over 30 years. The ADAAG, FHA guidelines, UFAS, and model codes access requirements, all contain remnants of the ANSI 117 code in one way or another.²⁵

Model Codes

The International Building Code is the minimum standard for building construction in the United States. Municipalities may have their own addendums that must exceed the standard set forth in the IBC. The accessibility standards in the IBC cover public buildings, public areas, and multi-family structures.

Local Codes

Some states have developed their own local amendments that meet or exceed the national standard (See Table 3.1).

²⁴ Hoke, John Ray. Eds. *Architectural Graphic Standards*. 9th ed. New York: John Wiley & Sons Inc. 1994. Page 8.

²⁵ Hoke, John Ray. Eds. *Architectural Graphic Standards*. 9th ed. New York: John Wiley & Sons Inc. 1994. Page 8.

Table 3.1 Source: United States Access Board

State	State Code
Alabama	Alabama Accessibility Code
Alaska	Alaska Accessibility Code (ADAAG)
Arizona	Arizona Handicapped Provisions- Arizona revised statute 34-401-411: Designing for the Physically Disabled Phoenix using UBC 1991
Arkansas	Arkansas Accessibility Code (ADAAG)
California	Title 24 California State Accessibility Standards, State Architectural Regulations for Accommodation of the Physically Handicapped in Public Facilities
Colorado	(code enforced at the county level)
Connecticut	BOCA National Building Code (1996) ICC/ANSI A117.1 – 1998 Connecticut Supplement (1999)
Delaware	Publicly funded projects: State of Delaware Architectural Accessibility Standards Privately funded projects: BOCA
District of Columbia	DC Law 6-216, BOCA 1990, DCMR 12-A, references ANSI A117.1-1990
Florida	Accessibility Requirements Manual references ANSI A117.1 1997
Georgia	Georgia State Accessibility Code
Hawaii	Hawaii Revised Statutes Title 9, Chapter 103-50 (1989) references ADAAG

Table 3.1 (continued)

Idaho	1997 Uniform Building Code
Illinois	Illinois Accessibility Code
Indiana	1998 Indiana Building Code and 1997 Uniform Building Code with Indiana amendments adopted by reference
Iowa	Chapter 104A Code of Iowa, 1990 Edition and Division 7 of the State Building Code
Kansas	Kansas Article 13, Sections 58-1301 to 58-1308 references ADAAG and UFAS
Kentucky	1997 Kentucky Building Code Kentucky Requirements for Access in New Construction references ADAAG
Louisiana	Official Manual of the Louisiana State Fire Marshal includes ANSI A117.1-1980
Maine	Maine Accessibility Code
Maryland	Code of Maryland Regulations 05.02.02 Maryland Accessibility Code for the Handicapped references ANSI 1980
Massachusetts	Rules and Regulations of the Architectural Access Board CM521 and Supplement 301
Michigan	Pt. 4 Construction Code Commission General Building Code Rules and Barrier Free Design Graphics
Minnesota	Chapter 1341 of the Minnesota State Building Code
Mississippi	Mississippi Code, Article 3 Section 43-6-101 to 43-6-125

Table 3.1 (continued)

Missouri	Public Buildings only, Revised Statutes of Missouri Chapter 8.610 to 8.655 as amended
Montana	1997 Uniform Building Code
Nebraska	Nebraska Revised Statutes Sections 72-1101 through 72-1124 of the Standards for Public Buildings
Nevada	Adopted ADA Guidelines for State and local government facilities
New Hampshire	Architectural Barrier-Free Design Code for the State of New Hampshire references ADAAG
New Jersey	Uniform Construction Code N.J.A.C. 5:23-7 Barrier Free Subcode
New Mexico	New Mexico Building Code 1997 Chapter 11 Accessibility & Appendix Chapter 11 Accessibility
New York	Article 13 of the New York State Code Facilities for the Physically Handicapped
North Carolina	North Carolina State Building Code Vol. 1-C, Making Buildings and Facilities Accessible to and Usable by the Physically Handicapped
North Dakota	Publicly funded: North Dakota Century Code, Section 48-02-19 and 54-21-3-04.1 - ADAAG references ND Century Code, Section 54.21.3-03-UBC Currently use 1997 UBC
Ohio	Ohio State Statues 3781.111 Administrative Code Provisions Chapter 11, Ohio Basic Building Code references the 2000 IBC with 2002 supplement and includes state amendments (ICC/ANSI A117-1998 and ADA Accessibility Guidelines as referenced standards).
Oklahoma	1999 BOCA Building Code
Oregon	Chapter 11 of the Oregon Structural Speciality Code, references ANSI 1986

Table 3.1 (continued)

Pennsylvania	Handicapped Act 235, PL 348 as amended by Acts 570,73,216, and 176
Rhode Island	Regulation SBC-14 through 17
South Carolina	1997 Code of South Carolina, Chapter 5 Article 3, Construction of Public Buildings for Access by Handicapped Persons
South Dakota	South Dakota Codified Laws 5-14-12 to 5-14-14 Public Buildings, references ANSI 1986; Uniform Building Code, 1994 Edition Chapter 11 - Accessibility
Tennessee	An Illustrated Handbook of Handicapped Section of the Tennessee State Building Code Vol. 1-L
Texas	Texas Architectural Barriers Act (TABAA) using Texas Accessibility Standards (TAS)
Utah	1997 Uniform Building Code
Vermont	Rules for New Construction and for Alterations to Existing Buildings, references ADAAG
Virginia	For State owned Buildings: Chapter VII of the Capital Outlay Manual (12/90 ed) ref. UFAS. For Publicly owned or buildings: Uniform Statewide Building Code, references CABO/ANSI A117.1 1992 edition
Washington	Washington State Rules and Regulations for Barrier-Free Design
West Virginia	Elimination of Structural Barriers in Public use Buildings and Facilities, references latest ANSI A117.1
Wisconsin	Wisconsin Administrative Code, Department of Commerce, Chapter Comm 69, Barrier Free Design
Wyoming	ADAAG

CHAPTER 4

MODEL OF ACCESSIBILITY

Some of our nation's cities have made it their mission to create communities that give all residents the opportunity to be active members of their communities. These cities have taken accessibility beyond what the laws require. They view accessibility as more than just adding ramps and accessible public bathrooms. They have given disabled residents equal opportunity to become visible active members of their community.

Irvine California

Irvine decided to be proactive in making their city barrier free to its 22,000 residents with disabilities. Irvine's view on accessibility is not just a coincidence the city planners and concerned residents designed accessibility into their new Master Plan to ensure that all residents and visitors to Irvine have full access to schools, parks, churches, recreation facilities and community entertainment.²⁶

The city has managed to achieve an exceptional level of accessibility by providing barrier free access to all of the amenities. Irvine offers a transportation service door-to-door" demand ride and shuttle services for persons with disabilities along with the first suburb-to-suburb commuter rail service that is fully wheelchair accessible.²⁷ Along with accessible transit, the community offers its residents the option of renting or

²⁶ Agran, Larry. "Irvine's Winning Application" National Organization on Disability, Feb 19 2003. March 7 <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1087&redirected=1&CFID=5359645&CFTOKEN=31328664>.

owning a home by collaborating with several companies and agencies to develop an affordable/accessible 40-unit apartment complex called Mariposa Villa, and a 25-unit apartment complex.²⁸

Homeownership is important to Irvine residents: the city has been able to make homeownership possible through the development and promotion of universally designed new home construction. Through a collaborative effort with the Irvine Community Development Company and the Building Industry Association of Southern California, the city has developed and implemented “Homes for the Future Today.”²⁹

Irvine has taken accessibility beyond the physical environment, they have developed their own system of checks and balances to ensure that the needs of the disabled citizens are met. They have developed a Disability Advisory Board, an access reporting policy, and a park standards task force, to not only protect the rights of the disabled, but to also involve the disabled community in the politics that impact their lives. Since most of these boards are made up of members of the disabled community.³⁰

In addition, to political involvement the community, Irvine has activities for its residents to get them involved in the arts and other community activities to create not only barrier free physical environment, but a barrier free social environment.

Irvine has also been able to provide unprecedented access to community events

²⁷ Agran, Larry. “Irvine’s Winning Application” National Organization on Disability, Feb 19 2003. March 7 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1087&redirected=1&CFID=5359645&CFTOKEN=31328664>.

²⁸ Agran, Larry. “Irvine’s Winning Application” National Organization on Disability, Feb 19 2003. March 7 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1087&redirected=1&CFID=5359645&CFTOKEN=31328664>.

²⁹ Agran, Larry. “Irvine’s Winning Application” National Organization on Disability, Feb 19 2003. March 7 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

³⁰ Garcia, Gustavo. “Accessible America 2002 Application” National Organization on Disability, Dec. 20 2002. March 7 \ 2006.

and community politics. This has made the disabled residents more visible and active members of their community, which is one of the greatest barriers the disabled has to face.

Austin, Texas

Austin has taken a similar approach to creating a barrier free environment. The city has demonstrated their commitment, by developing a Master Plan that includes plans to improve pedestrian traffic flow. By improving the sidewalks and ramps, and installing audible traffic signals. Austin also had the first transit authority in Texas to have 100% of its bus fleet completely accessible to passengers with mobility impairments.³¹ The transit system has also been adapted to fit the needs of the visually impaired community, by offering audible announcements of up incoming bus stops and Braille signs.³² The city has also made their city-founded housing projects more accessible, by developing the Austin Visibility Ordinance. This requires core accessibility features in construction of City funded housing that allows individuals with disabilities to more easily visit or live in these homes. Austin's SMART Housing initiative provides financial incentives for the construction of private affordable, accessible housing.³³ That is located near public transit and employment to create a

<http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

³¹ Garcia, Gustavo. "Accessible America 2002 Application" National Organization on Disability. Dec. 20 2002. March 7 \ 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

³² Garcia, Gustavo. "Accessible America 2002 Application" National Organization on Disability. Dec. 20 2002. March 7 \ 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

³³ Garcia, Gustavo. "Accessible America 2002 Application" National Organization on Disability. Dec. 20 2002. March 7 \ 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

sense of community inclusion of citizens with disabilities.³⁴ Austin has a strong commitment to creating a good community for all of its citizens, through offering opportunities for political involvement. Through offering accessible voting, and inclusion of citizens with disabilities in the development and implementation of public policy. The Austin Mayor's Committee for People with Disabilities (AMCPD) was established by City ordinance to encourage, disabled citizens to participate in the social and economic life of the City of Austin.³⁵ AMCPD works closely with Austin citizens with disabilities to insure an active voice in local government.³⁶

Austin has managed to create an environment that is much like that of Irvine, however Austin offers programs for families to assist with some of the burden of providing personal care for a disabled family member. Secondly, the city offers employment programs for disabled adult and youth.³⁷

Through exploring both of these cities, it proves that accessible cities are possible, and the solution does not always involve more money. It often just takes Initiative of the entire community to create change. In addition, by making our nations cities accessible it improves the perception and status of the disabled community. Lastly

³⁴ Garcia, Gustavo. "Accessible America 2002 Application" National Organization on Disability. Dec. 20 2002. March 7 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

³⁵ Garcia, Gustavo. "Accessible America 2002 Application" National Organization on Disability. Dec. 20 2002. March 7 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

³⁶ Garcia, Gustavo. "Accessible America 2002 Application" National Organization on Disability. Dec. 20 2002. March 7 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

³⁷ Garcia, Gustavo. "Accessible America 2002 Application" National Organization on Disability. Dec. 20 2002. March 7 2006. <http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1105&redirected=1&CFID=5359645&CFTOKEN=31328664>.

by making our nations cities accessible to all it is possible to improve the quality of life for all citizens.

CHAPTER 5

ROOM TO IMPROVE: INACCESSIBLE CITIES

Springfield, Missouri

When analyzing the accessibility of the city of Springfield, Missouri one must examine the city's history of relationships with other minority groups in order to understand the current situation that minority groups, including the disabled community, face. The city has a culture that is still very much segregated. Springfield has been this way since the Civil Rights Movement. This attitude makes life for a disabled individual difficult, and helps to explain the lack of advancement when it comes to barrier free access.

Springfield has been slow to change their way of thinking regarding not only the disabled, but also low-income community. The city lacks the necessary infrastructure to make the city accessible to the disabled community. The city lacks a reliable mass transit system, The "Access Express" which is the city's primary call and ride bus system is not reliable. In addition, many parts of the city do not have sidewalks or ramps, this is especially true in the low to moderate-income areas of the city, and some of the streets are narrow and have bar ditches. Therefore, it is difficult for pedestrian traffic to safely coincide with automobile traffic.

This is not the only issue the city has; Springfield has an even bigger problem regarding its housing - both privately owned and Government subsidized housing.

Springfield does not have any loan program specifically tailored to the disabled community, so getting a loan for a house is difficult. If you are lucky, enough to get a home, the programs that are intended to help with retrofitting are short of funds and so backlogged that it could be months or even years before funding becomes available.

In addition, most of the subsidized housing units are in high crime areas making it unsafe for disabled people since most of them live alone. Secondly, accessible units are in short supply, so a disabled person may wait several months for a unit to become available. Additionally, most of the units do not meet the minimum accessibility standard, because the city often does not enforce the laws. This forces people to move out into the periphery of the city where the housing is in safer neighborhoods, making them even more isolated because basic amenities are not available within walking distance, and mass transit is not available outside the city limits. Additionally, the city has some issues with their zoning. The city has areas that are owned by the county, but are surrounded on all sides by city owned property. This means that city sidewalks and other city services are not available to residents.

Even with all of these problems, Springfield offers its residents good employment opportunities through the sheltered workshop and the rehabilitation services. However, without dependable transportation and quality housing, it is difficult to hold down a job and be a productive, independent member of the community.

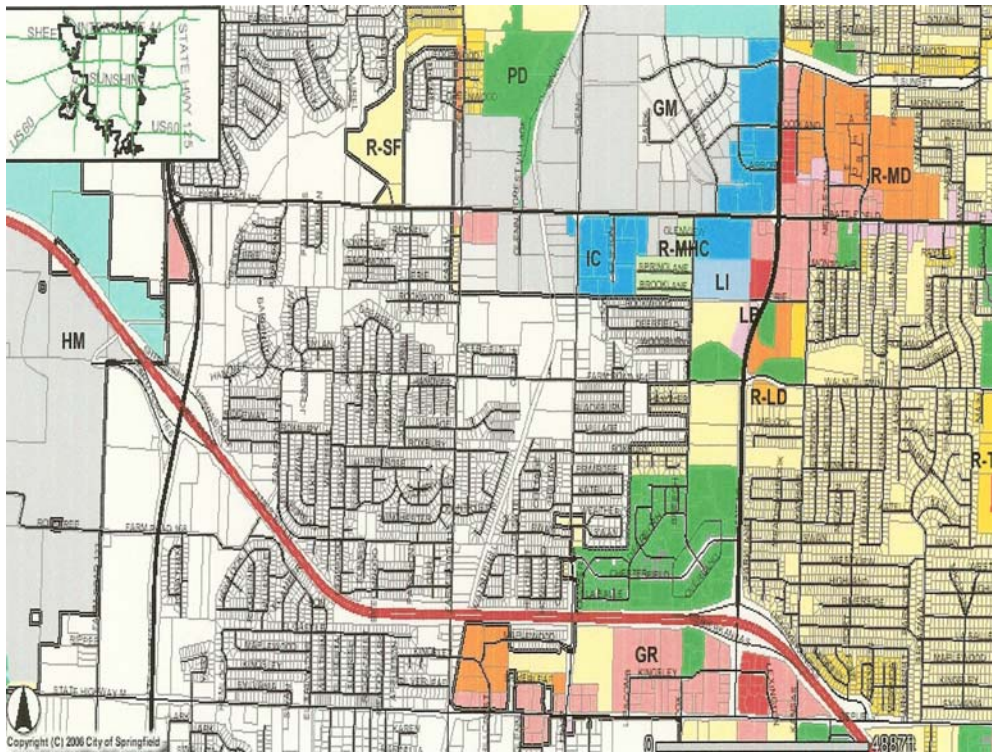


Figure 5.1 Springfield Missouri Zoning Map
White area is county owned land

Arlington Texas

Arlington is a city that started out as a suburban town and has grown into a major metropolitan area. With this growth have come problems. Arlington has issues with its overall layout, due to the fact the city has encroached on the Dallas area. The city has grown very rapidly and has traffic problems as well as mobility issues. First, the city is dominated by the automobile, which has made Arlington into an endless maze of six lane highways and busy streets. Due to a dependency on the automobile, the city lacks a mass transit system to serve its' residents.

Because of the lack of mass transit, residents have to either ask someone to drive them where they need to go, or brave driving their chairs through the traffic to get to

their destination. This becomes an issue of safety for both the driving public and the disabled public, for the reason that the streets are not really designed for pedestrian traffic, because a majority of the major roads are several lanes wide. For disabled people this is hazardous.

Texas is one state that is very accessible when it comes to public access to public buildings, and there is a higher rate of homeownership than most places. “There is a 63.8 percent homeownership rate for all Texas households. Of 1,268,418 total households with mobility or self-care limitations, 30.4 percent (385,599) are renters and 69.6percent (882,819) are owners”,³⁸ However, even with the high rate of homeownership, a majority of disabled Texans still live at or below the poverty level.³⁹

Both of these cities have issues that to most would seem like minor issues, however minor issues like these can take a city that has followed the accessibility laws to the “T”, and make the city an inaccessible, miserable place for disabled people to live.

³⁸ Texas Department of Housing and Community Affairs Division of Policy and Public Affairs. The Housing Needs of Texans with Disabilities. April 2005. 15 April 2006. <http://www.tdhca.state.tx.us/ppa/docs/hrc/05-DisabledTexans-050428.pdf>.

³⁹ Texas Department of Housing and Community Affairs Division of Policy and Public Affairs. The Housing Needs of Texans with Disabilities. April 2005. 15 April 2006. <http://www.tdhca.state.tx.us/ppa/docs/hrc/05-DisabledTexans-050428.pdf>.

CHAPTER 6

CONCLUSION: HOW CAN WE IMPROVE?

Our nation has made great strides over the past thirty years to create a barrier-free society. With all of the legislation and government programs, however the disabled community continues to be invisible in society. Why does this persist? Many disabled American's believe that to change the course that our nation is taking, our nation must first admit that a problem exists. The problem has roots in our nation's culture. Unfortunately, this issue is like any other minority issue; the problem is a result of society's perceptions and stereotypes. The only way to change the perceptions of society is to make the disabled community visible and involved. In order to be involved, accessibility must be addressed.

The problem with accessibility in society is a multi-layered problem, each layer affects another:

1. Money to finance projects
2. Problems with the way laws and codes are written
3. Outdated building standards
4. In some cases no regulations exist
5. Social Security administration rules are written as all or nothing

All of these problems are intertwined, which is why it is so difficult to remedy this problem.

One of the issues that influences decisions regarding accessibility is money. Many state and local governments frequently lack the appropriate funds to enforce the laws. In addition to money, individuals and municipalities often run into issues with the verbiage. Currently, the laws include phrases such as “if then” and “should” and in some cases this causes confusion. Secondly, the enormous number of federal laws and that are interrelated to one another, and then on top of that there are the state and local amendments to each law. This adds to the confusion and may explain why it has taken communities so long to comply with the accessibility laws. The complexity of the accessibility laws are only one of many flaws that exist in our nations laws and codes.

Currently, city planners, architects, designers and municipalities are using building standards that are outdated. For example, a majority of the wheelchair clearance standards are about twenty-five to thirty years old. Medical equipment is no longer made based on these standards. Why these standards continue to be used is difficult to understand. Other industries have updated their standards to meet the changing needs of the public. However, the design industry has failed to do so.

In some cases, no regulations yet exist, but are desperately needed, to remedy the weakness of the codes and statutes before the situation reaches critical status. Homeownership is an example; there are currently no federal laws that set guidelines for the accessibility of single-family residential homes. Living life in general becomes a challenge, because for someone with a disability, life often teeters on a delicate balance between what you want to do and what the infrastructure allows you to do. Government red tape is often what stands in the way of breaking down the barriers of

society.

It is time for a minimum accessibility standard for residential construction to be put in place to give the disabled population the opportunity to achieve the “American Dream” of owning a home that meets their requirements for comfort and security. There is no reason in this day and age that the people with special needs meet such an immense roadblock to achieving independence. The disabled community has made great strides in overcoming obstacles and becoming active members of their society. Having first achieved equal opportunity in education and breaking through the barriers to equal opportunity employment, the next step in achieving independence is homeownership.

This has been a source of contention among builders, developers and architects, because many argue that, it would cost too much to make residential construction accessible, therefore taking a chunk of their profit. This is a fair statement; cost depends on the level of modification that is needed. Universal design is like any trend in design- if it becomes the norm, the cost will go down.

The construction and development community has reservations about enacting a residential accessibility standard. Members of the National Association of Home Builders argue that there is not yet enough demand to warrant a change in the building codes. For this reason proposed code changes like RB33-01, which would have required a lower ground to threshold height to provide easier wheelchair access, was discarded because it was written as an accessibility standard. One cannot help but think they would support it if it were a matter of public safety and welfare, such as fire

egress.⁴⁰

Builders have a misconception about accessibility. Many developers and contractors believe that requiring a minimum level of accessibility will affect the marketability of a property. The reality is quite the contrary. If a minimum level of accessibility is part of the design on a new home, that home will meet the needs of the owners for a longer period, enabling them to build equity and potentially increasing the value of the property. By adjusting standard single-family residential construction as listed in the FHA guidelines (figure 6.1), the home becomes livable for more than one group.

Table 6.1 Source: A Basic Guide to Fair Housing Accessibility

FHA Guidelines
<ul style="list-style-type: none">• Accessible building entrance on an accessible route
<ul style="list-style-type: none">• Accessible and useable public and common use areas
<ul style="list-style-type: none">• Useable doors
<ul style="list-style-type: none">• Accessible route into and through the covered unit
<ul style="list-style-type: none">• Light switches, electrical outlets, thermostats and other environmental controls in accessible locations
<ul style="list-style-type: none">• Reinforced walls for grab bars
<ul style="list-style-type: none">• Useable Kitchens and Bathrooms

⁴⁰ 2001 International Residential Code. 2001 ICC Public Hearing Results Development Committee Building & Energy ICC. 2001. March 30 2006. http://www.iccsafe.org/cs/codes/2001cycle/ROH-IRC--B_E_Results.pdf.

On the other hand, a possible solution would be to change the current residential building code to include a new minimum standard that would apply to all residential construction. For example: hallways be four feet, all doorways to be three feet, and an accessible or adaptable entrance. In addition, some additional changes could be made to the codes that would not cost money to change. For example, the height and location of outlets and switches or reinforcing bathroom walls for grab bars. This would eliminate some of the stigma and issues associated with accessibility.

Building codes are not the only issue with attaining homeownership. Even if the codes were changed to include a set of guidelines for accessibility, there would still be the issue of acquiring financing. In addition, even if they were able to attain financing through a lender or through one of the government or community financing programs, what often becomes the deciding factor for most disabled people is how much it will affect their Social Security benefits. The way the rules are currently written, someone on disability will lose money or other benefits when they own property or go to work. Therefore, for many families this becomes a double-edged sword. They either have the stability and pride of owning a home or a life in government subsidized housing, which is often substandard and located in blighted areas which affects their quality of life.

One possible solution to this problem is to give incentives to housing developers to construct accessible housing through an inclusionary zoning ordinance, which includes tax abatements or other financial incentives to encourage the construction of accessible homes. Accessibility is also greatly impacted by the problem with suburban

sprawl and zoning. Therefore, high-density multi use planed developments that integrate mass transit stops, need to be encouraged by cities. Because by creating developments like this the level of social interaction and community involvement will be improved, which has been one of the most difficult issues for the disabled population to overcome.

Unfortunately, even if these suggestions were implemented one hurdle would still exist. The issues with Social Security Income (SSI) regulations would still exist, and could continue the cycle. Because one issue that kept appearing throughout this research was poverty, because of being on SSI. Because SSI benefits have not kept up with the cost of living, it is difficult to know were to begin in addressing this problem, should the minimum SSI payment be changed? Alternatively, should rent controls be in acted to make rents with in reach, of the disabled community? Who knows what the answer to solving this complex problem is. But it can no longer be ignored, because it is creating poverty, therefore we as a nation should set up and take notice, because if these problems are not addressed, the future for our nation looks bleak.

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BIOGRAPHICAL INFORMATION

Kellie D. Foster is originally from Springfield Missouri, where she graduated from Drury University in 2003 with a BA in Architecture. Kellie received two Masters Degrees from The University of Texas at Arlington in Architecture and City and Regional Planning in 2006. After graduation, she went to work for the family development company, and completed an AAS degree in Business Management.