

# **Disability, Marginalization, Empowerment, and GIS**

**By**

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## **Introduction:**

This paper concerns the potential of GIS in the field of disability policy. It suggests there are two distinct domains where GIS may empower disability groups. First, GIS is a method that may be used by policy analysts and researchers, to map whether public resources are accessible and appropriate given the size of catchment areas for populations and given the policy and program environment. Second, GIS is a method by which information may be consolidated and used by members of disability organizations and people with disabilities for their advocacy thus empowering people with disability. Furthermore, one should design GIS methodology so that it is usable by people with physical or intellectual disabilities, and has the potential for employment opportunities.

This paper is concerned primarily with the first domain and discusses how analysts from the public policy, governmental, and public utility arena may use GIS. Not only may they use it as a method to map whether such resources as employment, schools, restaurants, recreational facilities and transport networks are appropriately accessible given the size and scale of the catchment areas for populations with disabilities; but, GIS may be used to map and ascertain whether there is differential compliance with the ADA (American Disability Act). Compliance to the ADA and similar regulatory acts may vary by area of the country (North vs. South, East vs. West), urbanization (city vs. rural, downtown vs. suburb), and topography (coast vs. inland, mountain vs. plains). For example, maps showing the spatial distribution of people with disability with “regular employment”, “sheltered employment” and “no employment” may indicate particular areas of discrimination. Spatial distribution of types of housing – institutions, homes, nursing homes and independent living may also be traced. Do people cluster by accessibility and therefore does there exist in North American cities invisible “ghettos of the disabled”. If one maps according to type of disability, there may be systematic geographic patterns in these “ghettos”. One research area is whether governmental policy impacts this geography.

## **Objective:**

This paper is an example of how one could use GIS to track compliance with ADA. As a first example we use two sets of data which are sensitive to employment patterns for people with disabilities. One is the Job Accommodation Network (JAN), which is a service providing technical assistance to employers or others seeking technical information on accommodating persons with disabilities in their workplaces. The other is the US Census data on the number of people with disabilities and their relative institutionalization. These may not be the best indicators but we know that these indicators can give us valid conclusions in conjunction with

other indicators. They do provide us with an opportunity to see whether our hypothesis that GIS could be a useful tool for policy makers is valid. Finally, it sets the stage so that we can suggest the other measures that would provide a better and more exact analysis of the ADA and the spatially differential employment of disabled people in the United States.

## **The Context**

The context for this work is the legislative framework within the United States that calls for greater involvement of disabled people in the labour force. Within this framework the single most important federal piece of legislation in this regard is the Americans with Disabilities Act (ADA) which was signed into law in 1990. It prohibits discrimination on the basis of disability in employment (Title I). Other parts of the act prohibit discrimination in different areas <sup>i</sup>

### ***The ADA and its Administration***

Responsibility for the administration of the ADA is dispersed among several federal departments and agencies. The Equal Employment Opportunity Commission (EEOC) is responsible for the administration of Title I of the ADA, pertaining to employment discrimination in the private sector. The Department of Justice is responsible for employment in state and local government under Title I. <sup>ii</sup> In addition, there are a number of independent and semi-independent agencies funded to provide services of various kinds related to the ADA. For example, The President's Committee on Employment of People with Disabilities runs the Job Accommodation Network (JAN), which is the main service providing technical assistance to employers or others seeking technical information on accommodating persons with disabilities in their workplaces. <sup>iii</sup> The functions of the responsible departments and agencies are to promote the objectives of the ADA through various educational and other means and to administer a complaints resolution system. In educational outreach, one of the most significant efforts under the ADA has been making 'technical assistance' widely available including advice on how to accommodate the needs of persons with disabilities. The other major function of the administering bodies is the resolution of complaints. <sup>iv</sup>

### **Assessing Impacts**

Various measures can be used to track the impact of the ADA on increasing the employment of persons with disabilities, including census data and similar statistical sources, public survey polls, research reports, informational products provided by agencies monitoring impacts, media reports and interview data. Town meetings, surveys and census analysis have all been used with limited success. Some of their results follow:

#### **Town meetings**

A National Town Meeting tour conducted by the National Council on Disability (NCD) found that certain improvements had been achieved in terms of employer practices as a result of the ADA. For example, the NCD reported that employers are re-thinking what constitutes the essential elements of particular jobs. <sup>v</sup> In addition, they indicated that the job market is now more open due to the accommodations that are being made available, in particular assistive

devices, modifications of work spaces, more flexible work schedules and personal services available in the workplace ( e.g., interpreters, personal assistants, job coaches). <sup>vi</sup>

## Surveys

Surveys such as Shoemaker *et al* found similar progress. In their 1992 survey of 248 corporate executives in Michigan that 41.5 per cent of the corporations studied had fully-implemented early return to work policies to increase the job retention of workers who become disabled <sup>vii</sup>. However, according to other sources, the rates of employment do not appear to have increased significantly since the inception of the ADA. For instance polls conducted by Lou Harris and Associates in 1986 and 1994 indicate that two-thirds of working age persons with disabilities were not working in those years, most of who wanted to work . <sup>viii</sup>

## Analysis Census of data

The general employment figure for persons with work disabilities remained unchanged from 1995 to 1996. However, the per cent working full-time dropped from 18.4 per cent, or nearly a percentage point, from 1995 to 1996. Similar to the Harris poll, the US Bureau of the Census reported that only 27.8 per cent of working age persons with work-related disabilities were employed in 1996. Of these only 17.7 per cent were working full-time. <sup>ix x xi</sup> It is not too surprising to have found that women and visible minorities with disabilities, African Americans in particular, continue to face additional discrimination and employment challenges. <sup>xii xiii</sup> All of these methods of assessing impacts have a spatial component and would benefit from the use of GIS to show the spatial variation in employment for people with disabilities and compliance to the ADA.

## Factors influencing Impacts:

Numerous factors influence the employment of persons with disabilities in the United States. Some of these include the size of business, whether or not the person is a new hire or a rehire, the degree of financial and technical assistance, the degree of public and employer interest and support, and the employees knowledge about job accommodation and legislation.

## Big business small business

*Time* magazine reported in 1995 that the number of small businesses that have hired individuals with disabilities slipped from 54 per cent to 48 per cent since the ADA came into effect. *Time* quoted a legislative representative for the National Federation of Independent Business, a small business lobby, as saying, “They’ re i.e., employers fearful that if it doesn’ t work out they can’ t fire them” . <sup>xiv</sup>

## Rehires vs. new hires

Where employers are making efforts to accommodate persons with disabilities, the focus of their efforts seems to be directed at current workers instead of new job-applicants. For instance, of all the accommodation cases handled by the Job Accommodation Network (JAN)<sup>xv</sup> in the first quarter of 1996, 50 per cent concerned measures to retain current employees and 25 per cent

revolved around improvements in the workplace for current employees. Only 5 per cent of the requests concerned the hiring of new workers.<sup>xvi xvii xviii xix</sup> Similarly, using EEOC complaint data as an indicator, the focus of activity under the ADA has centred less on bringing individuals into the labour force than on retaining or promoting those who already have jobs.

In short, the data sources that can be drawn upon to measure the impact of Title I on the employment of persons with disabilities are diverse and eclectic. This problem together with the fact that the ADA is still a relatively new law make it difficult to arrive at definitive conclusions about the impact of Title I to date. It does appear, however, that Title I has been put to use mainly by individuals who are already attached to the labour market and remains to be more widely used by persons seeking access to employment for the first time.

### **Technical Assistance**

Aside from the ADA's changes in employment levels and in employer hiring, retention and job accommodation practices, there are also ways in which the ADA has shifted attitudes and awareness among the general public and among employers. The technical assistance rendered as a result of the Act, as well as employer efforts, has also led to a growing body of information about job accommodations.

### **Public interest and support**

Requests for information about the ADA are increasing. JAN fielded 12,210 calls on its 1-800 line for information about the employment of persons with disabilities in 1992/93. In 1994/95 JAN fielded 79,860 such requests, following successive year-over-year increases in the demand for information. This time frame coincided with the phase-in period for the ADA's Title I employment provisions. Most of the calls to JAN in 1995 were from private entities (61%), 18% from public entities and 21% from persons with disabilities. Most sought-after by all three groups was information about the ADA.<sup>xx</sup>

Internet access to JAN is also growing. JAN had 178,663 "hits" in the first quarter of 1996, an increase over 110,458 in the previous quarter.<sup>xxi</sup> According to an interview respondent for this research, the Department of Justice's Internet site is fielding a considerable volume of electronic traffic

### **Employer interest and support**

Employer interest in and knowledge about the ADA has been high. According to a Mason-Dixon Poll of January 1995, 94 per cent of executives from 309 randomly selected Florida Chamber of Commerce members said their businesses were somewhat or very familiar with ADA. JAN reported an 11% year-over-year increase in the number of employer requests for accommodation information (i.e., accommodation information cases) from October 1, 1993 through September 30, 1994. In terms of total volume the figure represents an increase from 19,825 cases in 1993 to 21,918 in 1994.<sup>xxii</sup>

On the other hand some employers have expressed concerns about the ADA, particularly in the small business community. Most have been regarding cost.<sup>xxiii xxiv</sup> Of particular issue to business

were the potential cost of the ADA's accommodation provisions to employers and the lack of precise tools for determining employer obligations that would enable employers to proactively determine the extent of their financial obligations to accommodate persons with disabilities. More recent polls suggest that employer support for the ADA is relatively strong, at least among larger companies<sup>xxv xxvi xxvii</sup>. The NCD maintains that compliance with the ADA has on the whole tended to be voluntary. JAN has reported that 38% of employers who have requested information about accommodations implemented the accommodations within two to three months after communicating with JAN. Another 30% of the decisions are in progress.<sup>xxviii</sup>

### **Knowledge about job accommodations**

Organizations such as JAN, the Disability and Technical Assistance Centres funded by the Department of Education's National Institute on Disability and Rehabilitation Research, as well as consulting firms and employers who have made efforts to accommodate persons with disabilities in the workplace, have developed a growing body of information about the job accommodation process. In many cases, effective "low tech" solutions have been identified that have made it possible for individuals to gain access to and remain in employment.

### **Other legislation**

In addition to the Americans with Disabilities Act, a number of other US federal statutes accord civil rights protections to persons with disabilities. These include the Rehabilitation Act, the Fair Housing Act, the Air Carrier Access Act, the Civil Rights of Institutionalized Persons Act, and the Individuals with Disabilities Act. Various state and local anti-discrimination laws provide protections for persons with disabilities extending beyond those mandated by the ADA.

However, a thorough analysis of the operation and impacts of the ADA is hampered by the lack of systematic data gathering and evaluation studies in the US. Instead, policy analysts have had to rely on discrete studies, opinion polls, various statistical sources and their own research interviews. The discrepant data sources yield inconsistent and sometimes contradictory insights into various facets of the law, its administration and its impacts. And the coherence between the ADA and other legislation that impacts on employment has not been systematically studied.

One of the most important areas of discrepancy has been the fundamental problem of lack of comparability across space. Indeed, many researchers believe that if one looks across the country one does not see a blanket or a social safety net, rather one sees a patchwork quilt that consists of a variety of "shreds and patches". It is hard the ability to visualize how both determinants and consequences vary across the landscape.

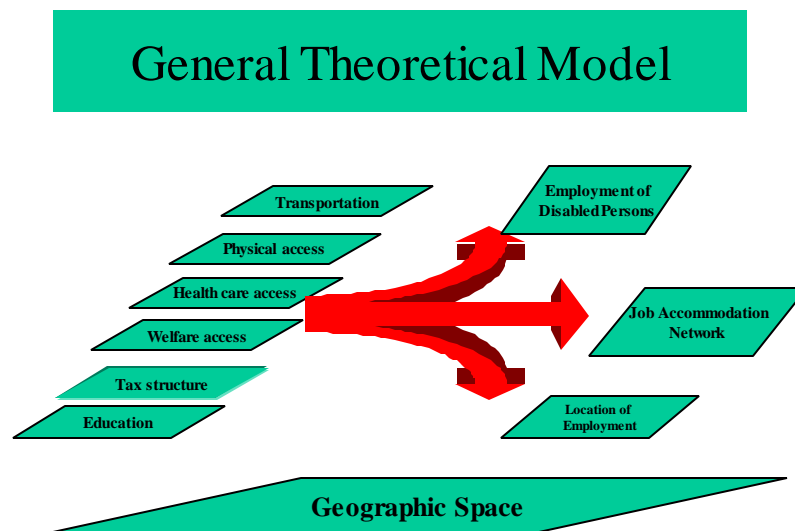
### **General Theory**

It is clear that people are able to locate themselves, display a wide range of territorial behavior, and move through a complex spatial matrix. Almost all humans whether disabled or not are conscious of their location, their territories and of the spatial relationships of other phenomena. These may be the locations of their homes or places of work, the territory in which they are

comfortable, or the spatial relationships to their tools of employment. They are able to abstractly consider these relationships, symbolize them and communicate them to each other. Almost all circumstances that are related to the human condition are located in space and time. Thus, the question of “where” is fundamental for not only a wide variety of social activities but for human existence itself. Space is a universal language.

GIS ‘s are an integrated, computerized tool for the storage, analysis, and visualization of spatial data providing spatially referenced data bases with methods for spatial analysis and output presentation. There is a potential for GIS to enable a more systematic analysis of the employment of disabled persons and to determine the factors that have an effect on greater employment. There are a vast number of factors which affect whether people with disabilities enter the labour market, return to work after they are injured on the job, or stay in the workforce when they become disabled. There is no single factor that makes the difference but rather a cumulative set of characteristics. What GIS makes possible is using the spatial grid as a universal etic grid. It is able to create meaningful comparisons among essentially diverse phenomena. The result is that one may appropriately compare “apples” and “oranges”.

The following figure is our concept of some of the layers (the “apples” and “oranges” and interactions that might be taking place.



**Figure 1. A General Theoretical Model of The Spatial Components of Factors Impacting Employment of People with Disabilities.**

## Methodology:

The methodology for this test consisted of several steps. First, the data from the web was obtained. We downloaded the Job Accomodation Network (JAN) figures from the web distributed by “state of origin”. These were classified temporally so that we had total accommodation calls for 1994, 1995, and 1996. Second, the accommodation calls were classified

by type of industry (e.g. manufacturing, transport, wholesale, etc.). Third, the accommodation calls were classified by type of disability (e.g. neurological, motor, sensory, etc.)<sup>xxix</sup> Fourth, the population and institutionalization figures from the U.S. Census were downloaded as well as the model estimates from 1995. Fifth, arc-view was used to make simple state maps for geographic comparisons. Sixth, limited spatial analysis including proximity studies were begun (These will not be reported in this draft ).

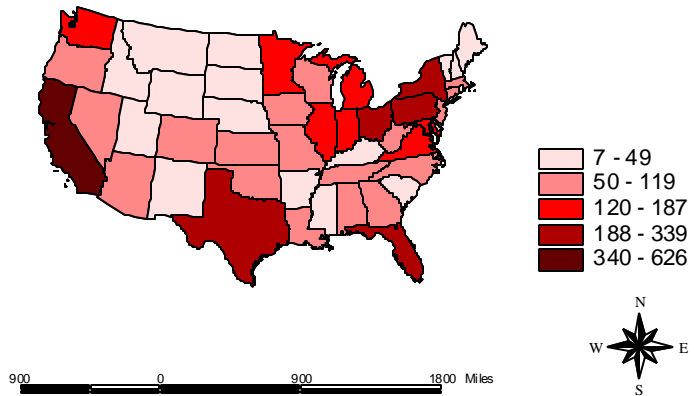
## **Results:**

Figure 2 shows employment accommodation calls over time for the years 1994, 1995, 1996. There is very little difference in the spatial pattern over time. All three years show what we have labeled the peripheral effect. The largest numbers of calls come from the Eastern Seaboard, the South, the Southwest, and the Western Seaboard. The smallest number of calls comes from the Midwest and the Northern central states. Thus, the “peripheral pattern” makes a broad based “u” around the United States. *One may summarize figure 2 as showing a temporally free peripheral pattern in employment accommodation calls.*

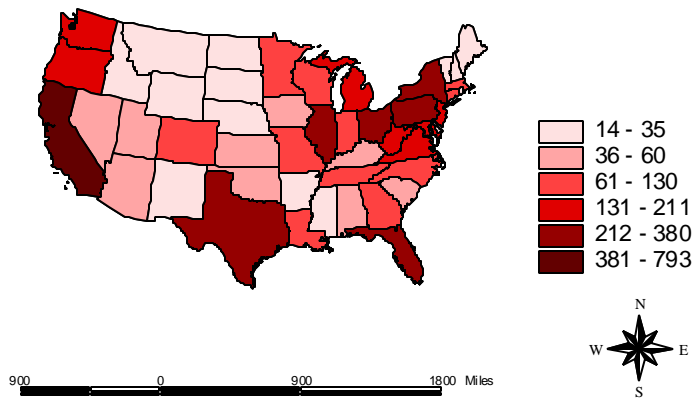
Figure 3 shows employment accommodation calls by type of industry for 1996. The peripheral effect is apparent but not as strong as in the case of all calls. Although not shown it does not change over time.. If one compares the various industries several generalizations may be made. The same states are getting the calls with slightly different weightings as one shifts from industrial sector to industrial sector. This appears to reflect greater state activity. The service sector calls appears to correspond to the potential areas where services are most accessible and the policies are the most liberal. One would expect the government sector to be far more evenly reflected across the state distribution. Both federal and state governments are located throughout the states and one might expect a more even distribution of calls. The manufacturing sector is not too surprising generally following the traditional manufacturing areas of the country. The Northeast is a heavy player. Neither transportation nor wholesale follows one’s expectations. In the case of transportation one would expect it to follow the major centers of population, roads, trains, or airports as one would also in the case of wholesale. One also expects in the case of wholesale far more calls to be near the great centers of warehousing in the central part of the United States. Finances which are not shown in this draft are also unusual in that they do not concentrate in New York or California the traditional financial centers of the country. *Summarizing figure 3 one would suggest that the peripheral pattern is consistent through the various sectors of the employment economy with services and manufacturing following their expected patterns but government, transportation, wholesale, and finance are not doing so.*

**Figure 2. Employment Accommodation Calls regarding people with disabilities for the years 1994, 1995, 1996.**

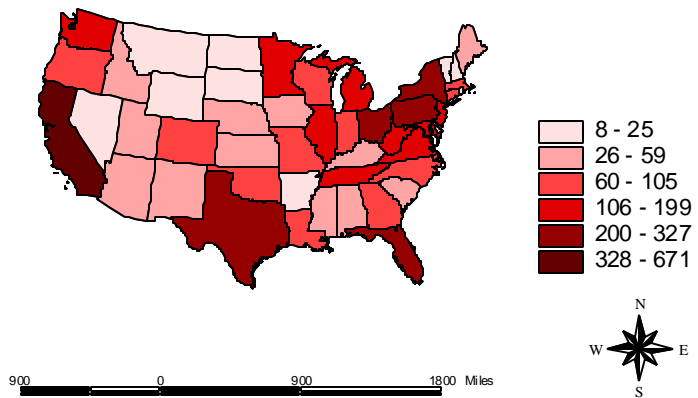
### Calls 1996

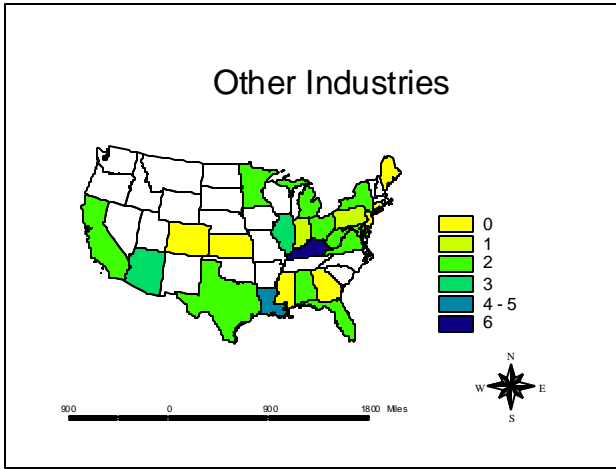
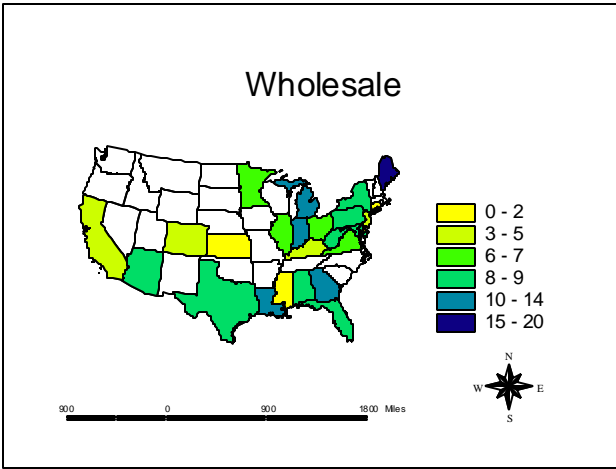
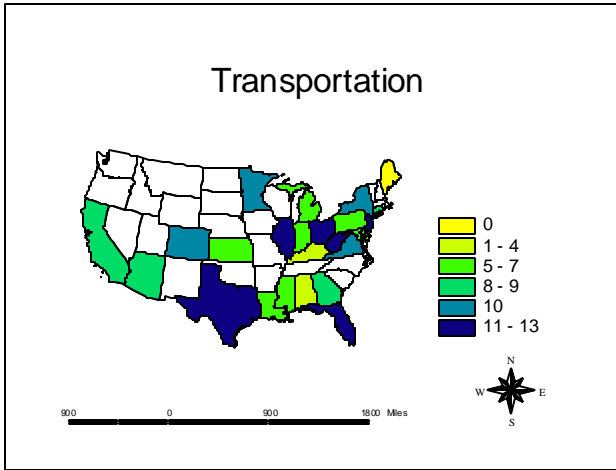
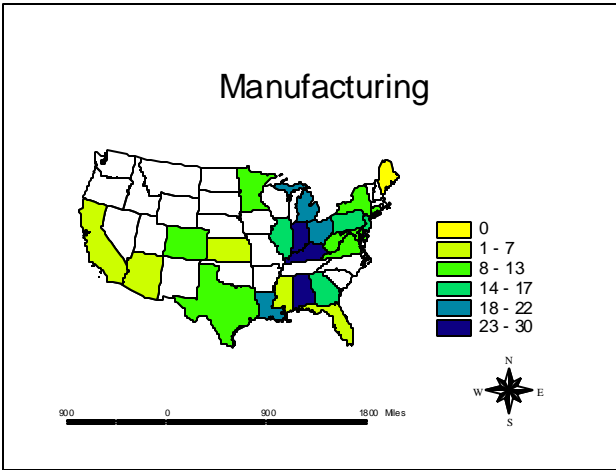
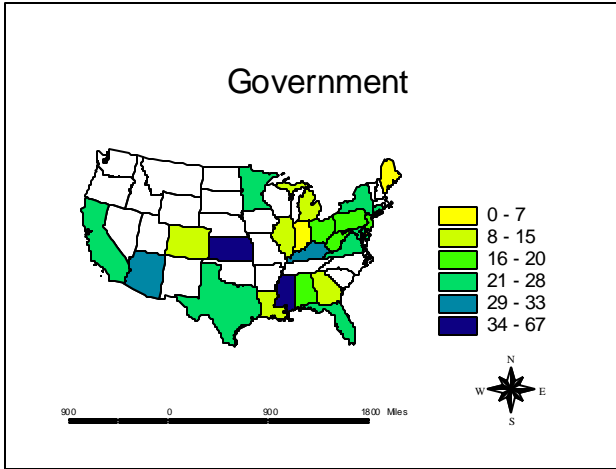
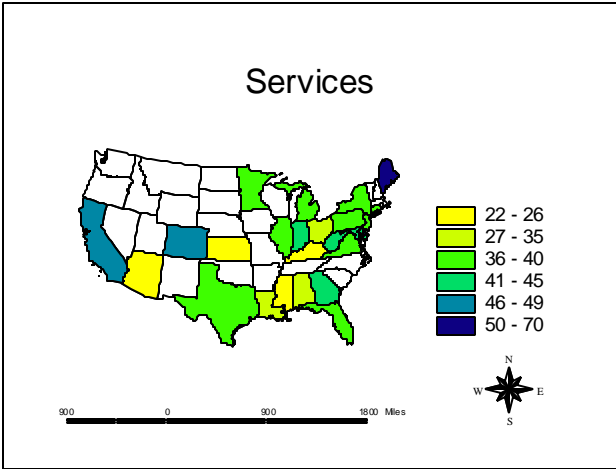


### Calls 1995



### Calls 1994



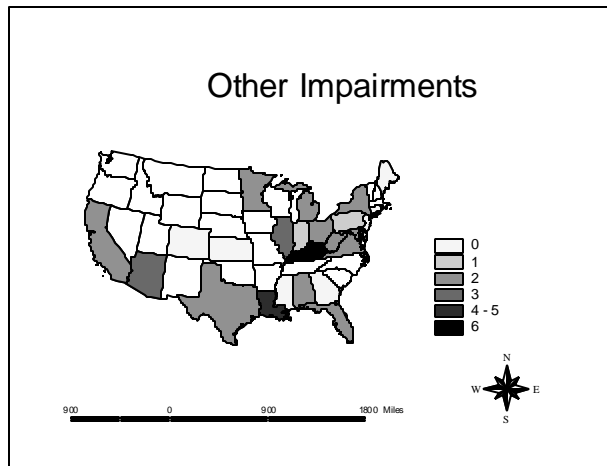
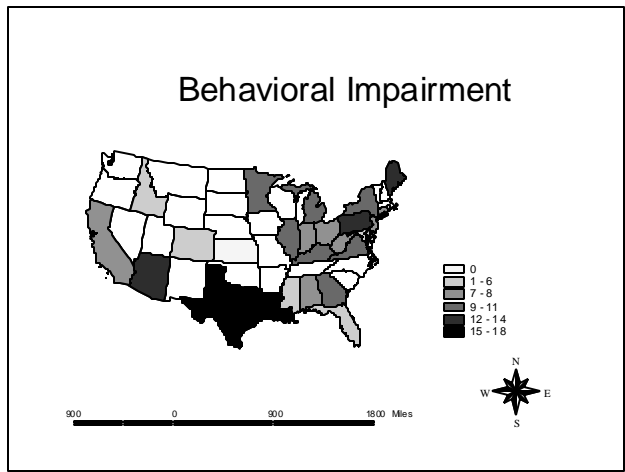
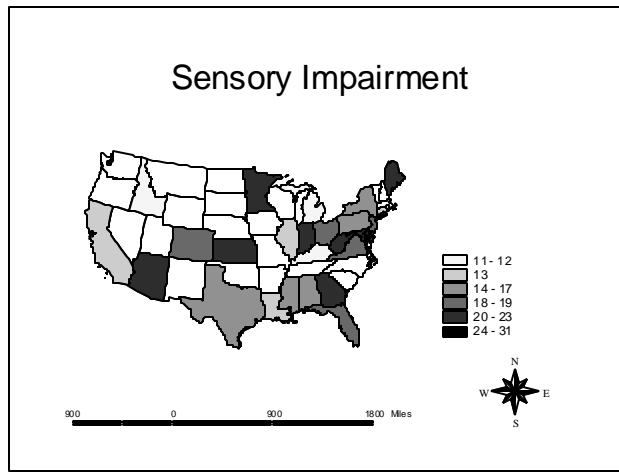
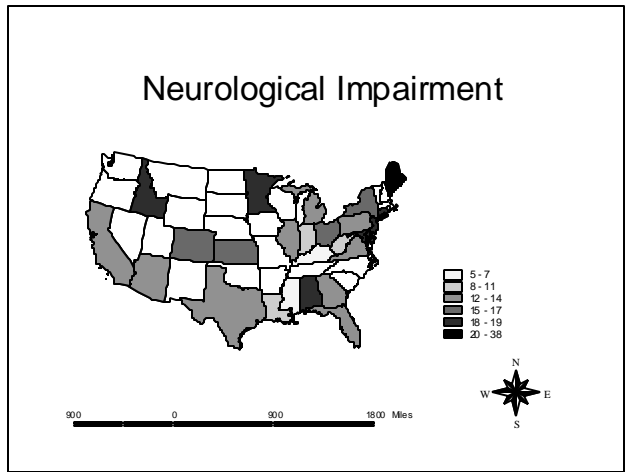
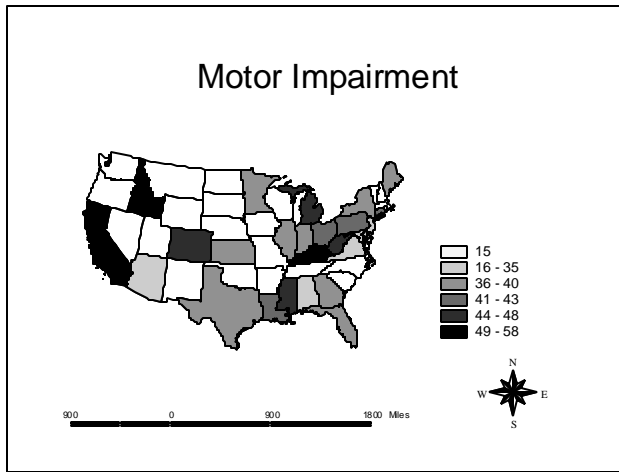


**Figure 3. Employment Accommodation Calls regarding people with disabilities classified by sector of the economy for the year 1996.**

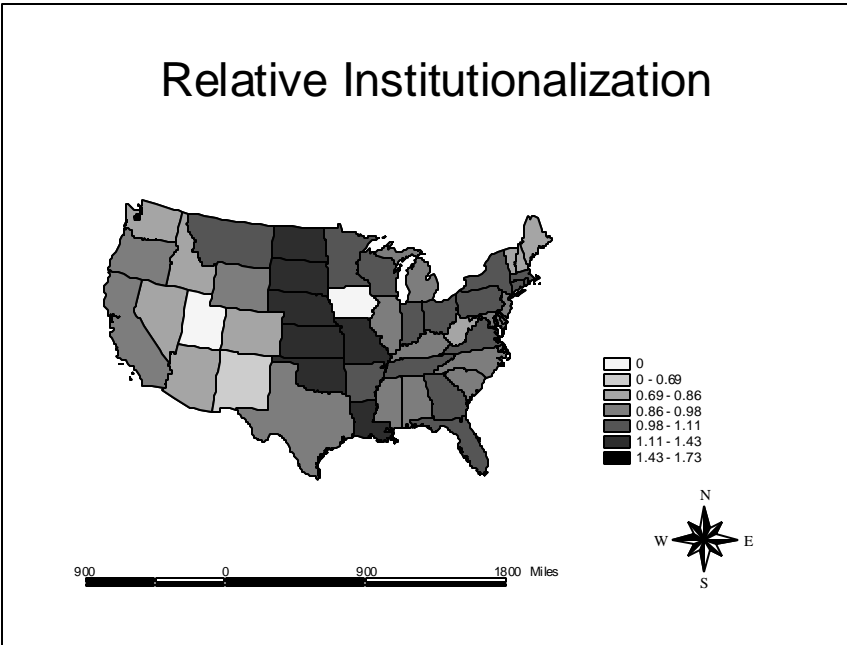
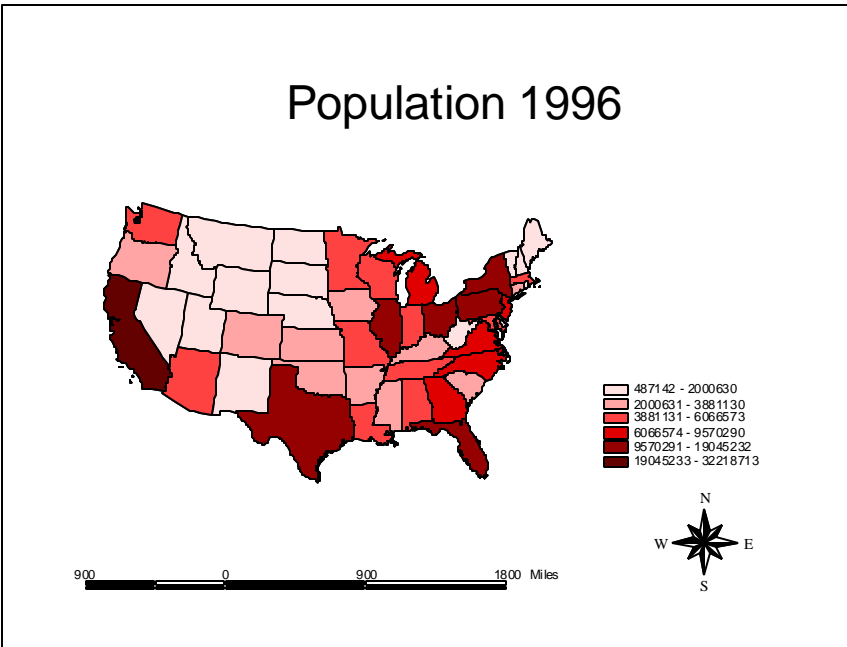
Figure 4 shows the calls to JAN classified by type of disabling impairment. The first and most important pattern one sees is that the peripheral distribution continues more or less universally across the entire disability spectrum. The sensory, neurological and behavioral impairments have more or less the same geographic distribution while the motor impairment stands out as being different. The large interest in accommodation related to motor impairment in California and Colorado may reflect greater numbers of individuals with motor impairments in those states. In addition, there is an interesting dichotomy based upon type of hires. When the resource industry employs people with disability the greatest numbers are rehires and the greatest number of disabling conditions resulting from employment in the resource industry are motor impairments. *Summarizing figure 4, one suggests that the peripheral pattern is consistent through the various types impairment.*

Figure 5 shows the distribution of the 1996 population and the distribution of relative institutionalization of people with disabilities by state. The important map is the one of relative institutionalization. It is calculated in the following manner. The number of people in the nation with disabilities is calculated as a percentage of the total population. The number of people with disabilities in each state is calculated as a percentage of the state population. The national figure is standardized to 1.0 and the state figures are related to this standardized figure to determine the relative institutionalization of each state. Thus, the map shows that some states have relatively more institutionalization than the national average and that some states have relatively less.

What is even more important is that relative institutionalization does not follow the peripheral pattern. In fact, it would appear to be the reverse. *To summarize, institutionalization takes place in the central United States away from the periphery. Where there is greater relative institutionalization there is a significant decrease in the number of requests for information regarding employment accommodation. It is independent of type industry or type of impairment. If JAN is an index of employment accommodation for people with disabilities this is a significant finding. Furthermore, it shows the utility of GIS for policy studies for marginalized people.*



**Figure 4. Employment Accommodation Calls regarding people with disabilities classified by type of impairment for the year 1996.**



**Figure 5: Population of the United States and Relative Institutionalization of People with Disabilities.**

## Inferences and Directions:

PPGIS can be shown to be useful for showing spatial patterns of labour force participation, using data from JAN, a federally funded information system designed as part of the technological information needed for people to comply with the ADA. This suggests that it may be possible, through the addition or overlay of other relevant factors to the spatial mapping, to further refine the analysis of where and under what conditions employment of disabled people occurs. Table 1 suggests a set of factors which are incentives and disincentives for the employment of people with disabilities. Many of them could be layers in a GIS mapping. This could provide material to make claims about the compliance with such legislative frameworks as ADA. It could also provide material to do some comparative analysis between states, thus providing a means for policy-makers, governments, employers and disabled people to understand the correlations between state legislation, policy and action. It may also provide the potential to look at policy coherence to determine if a particular set of interlocking factors is more likely, from a policy perspective to lead to significant increases in employment for the various populations of disabled people.

**TABLE 1. Incentives/disincentives to Employment that might be used as layers in a GIS on employment of people with disabilities.**

	<b><i>INCENTIVES</i></b> <i>FOR EMPLOYMENT</i>	<b><i>DISINCENTIVES</i></b> <b>Barriers to Employment</b>
<b>To Employ</b>	employment equity anti-discrimination legislation economic incentives such as tax wage subsidies job creation programs enabling policy conditions accessible transportation educated population insignificant cost transportation personal aids and devices personal supports technical knowledge vocational rehabilitation and management programs access to health care consumer control of supports and environmental accommodation	high cost cost of adaptation inadequate health care lack of education inaccessible workplaces increased or perceived increase in  discriminatory attitudes lack of transportation restrictive eligibility requirements  lack of portability of support service  low level of education & training restrictive entry criteria for training non-mandatory reporting procedures  lack of consistency in reporting

It need not be solely from a policy or governmental view. One could imagine rearranging the layers to represent whether regulation has a greater impact on actual employment than does non-regulated or voluntary compliance (Table 2).

**TABLE2. Incentives/Disincentives to Employer to employ**

	<b><i>REGULATED</i></b>	<b><i>NON REGULATED</i></b>
<b>To Employ</b>	tax incentives <ul style="list-style-type: none"> <li>• employment equity</li> </ul> ADA (anti-discrimination)  <ul style="list-style-type: none"> <li>• reasonable accommodation enforced, consistent standards</li> </ul> consistency in reporting	JAN (job accommodation network) NIDR information resources <ul style="list-style-type: none"> <li>• knowledge of accommodation possibilities &amp; means to employ</li> </ul> wage subsidies disability management  “ticket to work” (potential) <ul style="list-style-type: none"> <li>• job creation programs</li> <li>• business development grants</li> <li>• economic incentives</li> </ul> labour force development strategies
<b>Not to Employ</b>	Occupational health and safety  workplace safety regulations <ul style="list-style-type: none"> <li>• structure of welfare</li> </ul> BFOQ’ S (in 503 and 504) undue hardship defence	inaccessible transportation lack of financial support for  <ul style="list-style-type: none"> <li>• inadequate access to health care</li> </ul> accommodation costs lack of knowledge of accommodation union contracts inconsistent standards of employment  <ul style="list-style-type: none"> <li>• discrimination</li> </ul> restrictive eligibility requirement

But there are also a number of potential uses other than public policy for this type of information. First, PPGIS is a method by which information may be consolidated and used by members of disability organizations and people with disabilities. The use of this information to ensure that their human rights are being considered and discrimination prohibited in the numerous policy and operational decisions that governments make, directly empowers people with disabilities. At present, allocating, measuring and distributing resources spatially appear to be available only to the “abled). Populations with disabilities are not only being excluded but it appears that in the major mapping initiatives being developed by the United States and Canadian governments, the appropriate data are not being collected nor the appropriate variables defined. It is one thing for GIS’ s to define roads, postal codes, tax areas etc. based upon DEM’ s, Tiger Files and such. But, if such data as “accessibility” are not collected and such variables as “inclusion” are not defined, then populations with disabilities will be excluded in the next millennium of a valuable source of data on which to make claims from the state. It is incumbent on those developing GIS to make this information available and accessible and to help determine the type of data that could be collected to enable empowerment of groups.

Second, there is an obvious need to make GIS accessible to people with physical or intellectual disabilities. Presently, the design of GIS visualization and front end interfaces are not “user friendly” for people with disabilities. It will require an entire new look at existing systems as well as the redesign of GIS input and output systems. It will also be necessary to make it accessible in alternate formats, for people who are blind, for example. By making such systems accessible, it is possible to open up new job opportunities in GIS technology to people with disabilities. This will not only open up new job markets but will enable people with disabilities to do their own enabling research for advocacy purposes.

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i It prohibits discrimination in access to and benefits of public services (Title II), and in access to public accommodations and services provided by "private entities" (e.g. hotels, restaurants, movie theaters -- Title III). Title IV of the Act amends the U.S. Communications Act to enable people with hearing and/or speech impairments to communicate with others by telephone and to receive public service announcements by closed-captioning. Title V specifies a range of other “miscellaneous provisions”.

ii Line departments are responsible for administration, in their respective areas of competence, of Title II and III of the ADA pertaining to local and state government and commercial and public accommodation. The line departments are: Agriculture, Education, Health and Human Services, Housing and Urban Development, Interior Department, Labour and Transportation. The Department of Justice is responsible for any residual matters under Title II not covered by these departments. The Department of Justice is also responsible for administration of Title III issues of accessibility to public accommodations

iii . Funding for JAN has been provided in part through the EEOC. Within the Department of Education, the National Institute on Disability and Rehabilitation Research (NIDRR) funds ten regional Disability and Business Technical Assistance Centers as well as other regionally based activities.

iv The complaint resolution system is not simply a litigation service: it runs the gamut from primary assessment of incoming complaints to mediation and finally to legal action. All the departments and agencies focus first on encouraging voluntary compliance, then on resolving complaints through mediation and only resort to litigation when everything else fails. The Justice Department, for example, prides itself on having "fostered a high degree of voluntary compliance with a minimum of costly litigation" which success they attribute to their "educational outreach" efforts. Enforcing the ADA: A Special Fifth Anniversary Status Report from the Department of Justice, p2. July 26, 1995 published by the US Department of Justice, Civil Rights Division, Disability Rights Section.

v Those participating in the town hall meetings indicated that job qualifications and the job-application process are now fairer, reducing the overt prejudices persons with disabilities have faced in the job application process and providing persons with disabilities clear legal recourse where they suspect discriminating had been a factor in hiring or job-retention/promotion decisions.

vi Ibid., pp.12 - 15

vii Corporations surveyed ranged between 250 and 649 employers. The analysis indicated that corporate leaders' beliefs about and support for early return to work may be the best predictor of whether corporations put such policies in place. The proportion of respondents

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supporting early return to work policy represents a significant increase over the 8 per cent identified by Schwartz in a national study six years earlier, before the ADA came into effect.

Roger J. Shoemaker, Stanley S. Robin, Helena s. Robin, "Reaction to Disability through Organization Policy: early Return to Work Policy", Journal of Rehabilitation, July/August/September 1992.

viii Lou Harris and Associates, Harris Survey on Employment of People with Disabilities, New York, Lou Harris and Associates, 1986 and ,New York, Lou Harris and Associates, 1994 in Achieving Independence: The Challenge for 21st Century, A Decade of Progress in Disability Policy - Setting an Agenda dor the Future, Washington, DC: National Council on Disability, July 26, 1996

ix In contrast, 76.7 per cent of working age Americans without a work disability were employed in 1996, with 62.6 per cent working full-time. US Bureau of the Census, Table 2 Labour Force Status--Work Disability Status of Civilians 16 to 64 Years Old, by Sex: 1996, Washington, DC: US Bureau of the Census, Housing and Household Economic Statistics Division.

X In contrast, 76.7 per cent of working age Americans without a work disability were employed in 1996, with 62.6 per cent working full-time.

Xi US Census Bureau, Employment Rate of Persons with Disabilities, Table 1. Employment Rate Among Persons 21 to 64 Years Old by Disability Status: 1991, 1993, and 1994: Data from the Survey of Income and Program Participation.

xii D. Braddock and L. Bachelder, The Glass Ceiling and Persons with Disabilities, Washington, DC:U.S. Department of Labour, 1994. See also E. Yelin, "Personal Communication, Analysis of 1995 Current Population Survey-- March Supplement", Unpublished paper, 1996

xiii The National Council on Disability has found that 31 per cent or fewer of Hispanics with disabilities are working and that 70 per cent drop out of high school by their sophomore year.

xiv Jill Smolowe, "Noble aims, mixed results, in TIME Magazine, July 31, 1995, Vol. 146, No. 5.

XV JAN is a service of the President' s Committee on Employment of People with Disabilities which provides accommodation information at no cost to businesses, rehabilitation professional and persons with disabilities in the United States. JAN was established in 1983, nine years before the Title I provisions of the ADA came into effect.

Xvi Job Accommodation Network U.S. Quarterly Report, January 1 to March 31st, 1996, Washington, DC: Author, 1996.

Xvii Similarly, the (EEOC) has reported that, as of 1996 year-end, nearly 73,000 complaints were filed regarding employment discrimination under the ADA since 1992

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XViii Equal Employment Opportunity Commission, "Americans with Disabilities Act of 1990 -- Statistics FY 1992 - through FY 1996", Washington, DC: Author, 1997.

xix More than half of the complaints filed (51.9 %) revolved around discharge from employment based on disability, 28.1% around failure to provide reasonable accommodations and 12 % around harassment. Fewer than ten per cent of total accumulated complaints (9.8 %) concerned hiring decisions.xix

xx That is, the enquiries were not general ones about disability and employment but specific to the ADA. Job Accommodation Network, Report to Congress on the Job Accommodation Network, July 26 1995, Washington: Author. The demand for information continued to increase into the first quarter of 1996. See Job Accommodation Network U.S. Quarterly Report, JANuary 1 to March 31, 1996

xxi Ibid.

xxii Job Accommodation Network U.S. Annual Report, October 1, 1993 through September 30, 1994, Section B, Washington, DC: Author, 1994.

xxiii While few have expressed concern about the ADA's overall objective of eliminating discrimination against persons with disabilities, a vocal business lobby representing the United States Chamber of Commerce and National Small Business United brought to Congress' attention its apprehensions about the vagueness of the new Act's "undue hardship" and "reasonable accommodation" provisions while the bill was being drafted.

xxiv See Steven B. Epstein," In Search of Bright Line: Determining When an Employer's Financial Hardship Becomes "Undue Under the Americans with Disabilities Act", Vanderbilt Law Review, vol. 48, March 1995, pp.422-427 and footnote 172.

xxv . The Global Strategy Group, Inc. Found in its survey of October 1995 that, depending on the region of the US, between 47 and 59 per cent of human resource managers in Fortune 5000 companies believe the ADA has had a positive impact on their corporations.xxv According to a University of Michigan-Dearborn Study of 1994, 45 per cent of human resource professionals and general managers in companies with an average of 843 employees considered that hiring people with disabilities resulted in productivity gains for their companies.xxv Some 72 per cent of Florida Chamber of Commerce members in the January 1995 Mason-Dixon Poll felt the same way. Louis Harris and Associates, Inc. found in their national survey of senior corporate executives in July 1995 that 70 per cent supported the ADA and did not favour weakening it in any way. Some 89 per cent said they and their employees supported policies to increase the representation of people with disabilities in their companies, with 75 per cent of managers indicating they are likely to make greater efforts to hire people with disabilities in the next three years.

xxvi The National Council on Disability recently reported that many individuals with disabilities have successfully negotiated with private and public entities for ADA compliance and that very few have found it necessary to file lawsuits

xxvii National Council on Disability, Voices of freedom: America Speaks out on the ADA, A report to the President and Congress, Washington, DC: Author, July 26, 1995 pp. 21-22

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xxviii Report to Congress on the Job Accommodating Network, July 26, 1995, Washington, DC: Author, 1995.

xxix All of the above classifications were done by the JAN organization. Future research might choose others.