The Reasonableness of Working from Home in the Digital Age Jennifer Tennant, Ph.D. Moody's Investors Service

Abstract: The Americans with Disabilities Act states that employers must make "reasonable accommodations" to allow disabled employees to work effectively. Using summary statistics, a theoretical model and a legal history, this article will attempt to determine whether home-based work is a "reasonable accommodation" under this law.

Key Words: home-based work, reasonable accommodation, Americans with Disabilities Act

There are only two known photographs of Franklin Delano Roosevelt in his wheelchair (Franklin Delano Roosevelt, n.d.). During the time of his presidency, the common view in the medical profession was that disabled people could not be rehabilitated. Not surprisingly, "(a)ware of the stigma attached to physical disability, Franklin D. Roosevelt went to great lengths to hide his own [disability] so as not to shake the public's faith in his ability to lead the nation" (Gallagher, 1985, as cited in O'Brien, 2001, p. 21).

The world has changed drastically since Roosevelt's presidency. People living with disabilities have become more integrated into society and discrimination against them has decreased. The disability rights movement led to the Rehabilitation Act of 1973, but the act only applied to those in the public sector (U.S. Department of Labor, 2008). The Americans with Disabilities Act (ADA) (1990) followed. It was signed into law on July 26, 1990 and became effective two years later. The ADA expanded coverage, providing protection for those in both the private and the public sectors. Title I of the ADA addressed the employment situation of people with disabilities.

The ADA was enacted to mitigate the discrimination against people with disabilities and to help them participate in all aspects of life, including the workforce. Title I of the ADA¹ requires that employers take steps to accommodate disabled employees. If a disability impedes the ability of an employee to complete necessary job tasks, the ADA states that the employer must try to make changes or accommodations that would allow the employee to work effectively. There is still a tremendous lack of clarity among employers regarding both the scope of their responsibilities under this statute and the definitions of a "reasonable accommodation" (Ludgate, 1997, p. 1311). Employers can accommodate workers at the onsite workplace or by allowing them to work from home. Working at home goes against the traditional constructs of work, so it brings particular challenges to the development of a complete body of law that covers workers (Ludgate, 1997, p. 1313).

This article addresses two related topics. First, it outlines the legal history of home-based work as a prospective "reasonable accommodation" under the Americans with Disabilities Act. There has been much reticence to accept home-based work as a reasonable accommodation, but technological improvements are changing this viewpoint

in society, if not in legal precedents. Second, through the use of summary statistics and a theoretical model, the article outlines the employment landscape for persons with disabilities before and after the passage of the ADA, illuminating the work-state of people with disabilities—out of the labor force or in, employee or self-employed, working from home or onsite. These two topics will be brought together to determine whether or not the "reasonable accommodation" mandate of the ADA coupled with technology improvements allows home-based work to become another avenue to increase the labor force participation of people with disabilities.

The Scope of the Americans with Disabilities Act

The ADA was enacted in order to reduce discrimination against people with disabilities and to bring these individuals into mainstream society (Ludgate, 1997, p. 1313). Title I of the ADA deals with employment discrimination, which is a key factor that contributes to economic hardship in the disabled community. The ADA protects "qualified individuals" with a disability. Title I of the ADA defines a qualified individual as an employee who "[either] with or without reasonable accommodation . . . can perform the essential functions of the employment position that such individual holds or desires" (42 U.S.C. § 12111(8), 1990). An individual's qualification is inextricably bound with the concept of reasonable accommodation (Ludgate, 1997, p. 1314).

The Interplay between Working from Home and the Goals of the ADA

Working at Home as a More Viable Option

The vast majority of employees commute in the morning to a workspace that is separate from their homes. However, strides in technology have allowed telecommuting to be a more viable option. Telecommuting became much more prevalent in the 1990s and continues to thrive. In fact, according to a Survey of Income and Program Participation study, in 1997, more than 6.4 million wage and salary workers worked exclusively from home (Kuenzi & Reschovsky, 2001).

The benefits of working from home for workers include increased flexibility and control, a reduction in time spent getting to work, and lower transportation costs. Working from home also has benefits for employers, including "savings on office overhead, lower employee absenteeism, increased productivity, improved employee morale, and higher employee retention" (Ludgate, 1997, pp.1322-1323). Despite all the benefits of working from home, there are a number of barriers that limit its expansion. For example, working at home is not a suitable option for jobs where face-to-face contact with the public or clients is necessary. For instance, a waiter could not feasibly work from home. Even in jobs that don't require "face time," working at home leads to management challenges, including performance monitoring and communication delays. However, the latter of these issues is declining as the power, speed, and prevalence of email increases.

Even if telecommuting is appropriate for a specific job, it might not be suitable for every worker. Some people need constant supervision and cannot work independently

in an effective way. Others may have the ability to work effectively at home, but prefer to work in the collegial atmosphere of an office. Some people believe that there are economies of scale in an office space – that the exchange of ideas lead to greater productivity because a problem can be figured out more quickly with more minds.

The *Vande Zande* Presumption against Working from Home – Is it Necessary to be Onsite?

Vande Zande v. Wisconsin Department of Administration is a Seventh Circuit case that addressed whether working from home is a reasonable accommodation under the ADA. It used a number of "excessive absenteeism" cases as a foundation from which to build. These cases evaluated whether serial absenteeism due to a disability is something that an employer must accommodate. The courts:

"... Have held that disabled employees are not qualified for a position if they cannot maintain predictable attendance at work. Typically, these courts support this conclusion by noting the disruption caused to an entity's operations when an employee is not reliably present. ... These declarations have formed the basis for a presumption, followed in some telecommuting cases, that because physical presence at work is an essential function of employment, telecommuting is almost by definition an inappropriate accommodation" (Ludgate, 1997, pp. 1324-1325).

Vande Zande stands for the proposition that working at home is almost never appropriate.

The presiding judge, Richard Posner, stated in his decision, "It would take a very extraordinary case for the employee to be able to create a triable issue of the employee's failure to allow the employee to work at home" (*Vande Zande v. Wisconsin Department of Administration.* (1995), p. 545). The court based this statement on the belief that most jobs take group effort, and having one of the team members away from the office would substantially lower the productivity of the group. In order to support this presumption, the court pointed to excessive absenteeism cases and held that in most cases an employer does not have to allow an employee to work from home.

Other courts followed *Vande Zande*'s lead and presumed that working at home should only be appropriate in unusual cases.² The outcomes of these cases were premised upon the assumption that consistent attendance is a fundamental job requirement. Even though some courts after *Vande Zande* took a fact-based approach and did not accept a blanket prohibition on home-based work, their decisions were framed by an assumption that working at home is not an appropriate accommodation.

Is the Presumption Against Home-Based Work Based on the Wrong Framework?

The presumption laid out in *Vande Zande* in evaluating the reasonableness of working at home lies on unstable ground (Ludgate, 1997, p. 1331). Judge Posner and the Seventh Circuit relied on excessive absenteeism cases when they said that physical presence was an essential function of the vast majority of jobs. Consequently, they

virtually eliminated the possibility of working from home as a reasonable accommodation. Under this calculus, the home-based work option suffers from a wholesale prohibition. Thus, courts, in following the *Vande Zande* reasoning, have not needed to engage in fact-specific analysis (Ludgate, 1997, p. 1331).

Further, the court failed to explain how these excessive absenteeism cases were relevant in the telecommuting framework. In a typical excessive absenteeism case, "adequate job performance and physical presence at work are interrelated, either because the plaintiff's job cannot be performed off premises or because the plaintiff is unable to work with any regularity" (Ludgate, 1997, p. 1332). This assumption is different in the typical telecommuting case. In this area, the employees argue that physical presence is not a factor in performance. A fact-based approach must ensue to see if the employee actually can work productively at home. If we rely on the presumption that presence is essential, then the fact-based approach of the specific case is a moot point. While employers definitely need high quality performance from their employees, it is not at all clear that employers need their physical presence to engender it.

Is Working from Home Feasible?

The *Vande Zande* court also grounded its assumption against home-based work on the supposition that working at home significantly lowers productivity because of the inherent lack of supervision. A fact-based analysis is needed to determine the suitability of a specific person and a specific job to telecommuting. As detailed above, courts have generally underestimated the plausibility of working from home by declining to analyze beyond the blanket prohibition of home-based work (Ludgate, 1997, pp. 1332-1333).

Technology has grown with leaps and bounds in the past decade. Now fax machines, email, and conference calls are common features of life. This new environment allows people to meet deadlines and share ideas with their coworkers, regardless of their physical location. In the *Vande Zande* decision, Judge Posner recognized that the premise against working from home would weaken as technology advances but underestimated the technological framework already in existence:

"Vande Zande was argued in 1994 and decided in January 1995, when companies like CompuServe and AOL were just starting to provide Internet access to large numbers of in-home users and Amazon.com began selling books online. Less than a year before Vande Zande was published, Vice President Al Gore first coined the phrase 'information superhighway' in a speech outlining the administration's support of the fledgling Internet and its commitment to revolutionary growth in an information technology industry" (Valenza, 2004).

Now, more than ten years later, technology has evolved and the feasibility of home-based work can no longer be denied.

The ADA's Reliance on the Case-by-Case Approach

The case-by-case approach in determining whether or not an accommodation is reasonable is not only correct, but also the approach mandated by the ADA (Ludgate, 1997, p. 1335). The ADA requires that courts must complete a fact-based analysis that takes into account the interests of both the employee and the employer. The presumption against working from home based on physical presence as an essential function goes against the requirement of a fact-based investigation of reasonableness. This presumption also disqualifies plaintiffs who need to work from home. They are in a catch-22 situation since physical presence is required to be qualified for a certain job and Title I of the ADA protects only "qualified individuals." Therefore, the presumption precludes the give and take of employer and employee in determining a reasonable accommodation. The "presence is essential" presumption allows the employer to refuse to examine the feasibility of setting up a telecommuting arrangement with the employee. Evan Kemp, a former commissioner of the EEOC, gave this frank explanation of disputes regarding reasonable accommodation: "[I]f [an employer] wants disabled people, the accommodations really don't become a burden. If they don't, they always do" (as cited in Valenza, 2004).

The presumption against home-based work belies the purpose of the ADA, which is to help bring disabled workers into the ranks of the employed. A work-from-home arrangement might be the only viable option for a person who cannot leave home on a regular basis. Excluding a whole category of accommodation from thoughtful deliberation seems to go against the tenets of the ADA. In fact, the EEOC code expressly states that the point of a fact-based framework is to expand the range of employment opportunities for disabled workers.

The Change in the Employment Landscape for the Disabled during the Dawn of the Americans with Disabilities Act

Was the world a more favorable place for those with disabilities in 2000 than in 1990? Were people with disabilities more likely to be working in 2000 than in 1990? If they were working, were they working at home or onsite? Did the option of home-based work facilitate their labor force participation?

In this article, the indication of disability is based on self-identification. This can lead to measurement issues as well as societal influences. That is, self-reporting could result in either an overstatement or understatement of true disability. It could overstate the number of the truly disabled if those without disabilities "identified" as disabled to get workplace accommodations or to justify being out of the labor force. On the other hand, it could understate the number of disabled individuals if the respondent feels stigmatized by accepting that identity. The passage of the ADA increased the visibility and societal acceptance of the disabled, but it also created a new protected class. Both of these factors could lead to an increase in the number of people who identify as having a disability, many of whom might not have the ability to work. In an article written for the Disability Statistics Center, Kaye (2003) writes, "Any increase in the proportion of the disability population who are unavailable to work could easily mask any gains made in employment opportunities for those who are available to work" (p. 15). We need to keep

this in mind when looking at changes in labor force participation of people with disabilities after the ADA went into effect.

Another caveat is the possible unintended consequence of using a work-related disability measure. One consequence of the ADA is that, if it is effective in its goals to help integrate people with disabilities into the workplace, fewer people will identify themselves as being limited or unable to work. A person who formerly self-identified as having a work disability would be currently working and, thus, by definition, would no longer be able to answer affirmatively when asked if she is unable to work. Therefore, even though she needs accommodation to be able to work, she would not be counted as a person with a work-related disability in the Census results. This result would be misleading; it would appear that the work participation of those currently disabled had decreased. This change in disability status would lead to a kind of adverse selection bias where only those who are unable to work would be considered disabled. This scenario might lead to the false conclusion that the ADA had either no or a negative effect on the employment rates of people with disabilities (Schwochau & Blanck, 2003, p. 71).

The data used below come from the Integrated Public-Use Microdata Series of the Census (IPUMS) (Ruggles et al., 2004). The IPUMS data allows the respondent to identify herself as having a number of different disabilities. The 1990 and 2000 waves of the Census outlined three consistent categories of disabilities—disabilities limiting work, disabilities limiting mobility and personal care limitations. If the respondent identified as being in any of these categories, he or she is considered to have a disability.

Table 1 outlines the employment landscape for people with disabilities in 1990 and 2000. It shows the number and percentage of people with disabilities in various work states and the changes in this environment during this decade. The Americans with Disabilities Act only covers employees. Those who are self-employed are not covered under the auspices of the ADA. All of the non-ADA changes of the 1990s affected the self-employed disabled in the same way as the disabled who were employees. Therefore, the self-employed can be used as a comparison group to see what effect the Americans with Disabilities Act had on the employment status of people with disabilities.

Summary Statistics

In 1990, there were 5,521,148 people in the United States who described themselves as having a disability, accounting for 8.1% of the population. More than half (3,204,010) of people with disabilities were onsite workers – approximately 50% as onsite employees and 8.4% as the onsite self-employed. Only 81,877 people with disabilities worked at home–0.5% as employees and 1% as self-employed. More than 40% of people with disabilities in 1990 were out of the labor force. This dearth of homebased workers could be the consequence of the lack of telecommuting resources and computing power at that time.

Persons with disabilities made up a large proportion of the out of the labor force population, with 25.2% identifying as disabled. Those who were working in 1990 were

less likely to identify as having any sort of disability--5.2% of onsite employees, 8.4% of the onsite self-employed, 6% of home-based employees, and 5.2% of the home-based self-employed.

By contrast, in 2000, 7,515,761 people identified as being disabled, a 36.1% increase from 1990. The percentage of the population identifying as having a disability increased as well, rising to 11.3%. This is a bit higher than the figures in the Current Population Study, which showed "a significant 1 percentage point difference between the averages prior to and including 1991...and later" (Hotchkiss, 2003, p. 13). The increase in the number of people with disabilities may have been caused by an over-reporting of disability, which stemmed from the passage of the Americans with Disabilities Act. The difference in the scale of the increase suggested by the two datasets could come from the varying definitions of disability used, as discussed earlier.

According to the IPUMS data, between 1990 and 2000, both the employment status and worksite location of people with disabilities had undergone important changes. A greater number and percentage of people with disabilities were onsite employees and home-based employees and fewer were out of the labor force. Overall, the number of people with disabilities who were self-employed onsite or at home increased, but the percentage fell or stayed the same. In 2000, 76.8% of people with disabilities were onsite employees, 4.8% were self-employed onsite, 0.8% were home-based employees, 1.1% were self-employed at home, and the remaining 16.5% were out of the labor force.

There were 144,078 home-based workers and 6,134,703 onsite workers who identified as disabled in 2000. People with disabilities comprised 9.1% of home-based employees and 8.3% of the self-employed who worked at home. Those with disabilities made up 10.4% of onsite employees and 10.5% of the self-employed who worked onsite. Approximately one in five people who were out of the labor force in 2000 had a disability.

The number of people identifying as disabled rose almost 40% during this decade, but the number of people with disabilities who were employees increased by an even greater amount. Disabled home-based employees increased in numbers by 140% from 1990 to 2000, and those who were onsite employees increased by 110%. The number of home-based self-employed persons with disabilities increased as well, but in a more muted fashion. Persons with disabilities were less likely to be part of the onsite self-employed in 2000 than in 1990.

There was a drive for those with disabilities to go to work, regardless of worksite or self-employment status. Almost 3 million more disabled people worked in 2000 than in 1990 and almost 1 million fewer identified as being out of the labor force during that time. There was also an increase in the number of disabled people in the workforce who identified as having a disability that limited work. It seems like two things were happening during this period—people with disabilities who were out of the labor force in 1990 became employed either onsite or at home by 2000, and those who did not identify

themselves as disabled in 1990 did so in 2000. The ADA may have had an influence on both of these factors.

The Theoretical Basis for Home-Based Work³

The theory behind the home-based work model presented in this paper is based on "Home-Based Work and Women's Labor Force Decisions" by Edwards and Field-Hendrey (2002), which in turn is based on previous work done by John Cogan on fixed costs and labor force decisions.

Edwards and Field-Hendrey outline two differences between onsite work and home-based work:

"First, the fixed costs associated with working (e.g. time costs associated with commuting, out-of-pocket commuting expenditures and clothing costs) are greatly reduced for home-based workers. Second, home-based workers may be able to engage in some joint production of income and household 'commodities'" (Edwards & Field-Hendrey, 2002, p. 174).

Edwards and Field-Hendrey's analysis focuses on the labor force participation of married women. Since married women often do the majority of the child-rearing and household maintenance in heterosexual relationships, they have a different decision making process than men when considering whether or not to enter the labor force and for how many hours. Women have different reservation wages, the minimum wage level to induce a person into the market, and this reservation wage is dependent on many factors, including other income and presence of children in the family.

There are differences in the fixed costs of working onsite as opposed to working at home. In order to work at an onsite job, a person has to incur two different types of fixed costs – monetary and time costs. These costs may include buying work clothes, maintaining a car, buying gas, paying for parking, buying a bus pass and spending commuting time in the car or bus.

Fixed costs are not the only things that differ between these two work-states. There is also a different wage offer given to those who work at home as opposed to those who work onsite. If the wage offer were the same regardless of work-state, then the opportunity set for those who worked onsite would always fall inside the opportunity set of the home-based because of the lower fixed costs associated with working at home. Therefore, a person who had no preference between working at home or working onsite would always choose to work at home because she would be on a higher indifference curve.

But, data shows that the vast majority of people in the labor force work onsite. Therefore, the income that a person gets from wages must be higher for those who work onsite relative to those who work at home. Some of the reasons for this lower wage offer were outlined in the above section *Working at Home as a More Viable Option*.

Monitoring difficulties, the lack of synergies of workers in the same space, the unsuitability of certain jobs for home-based work, and the belief that home-based workers are less productive than their onsite counterparts are all reasons why there is a lower demand by employers for home-based workers. This leads to a lower wage offer for home-based workers relative to onsite workers.

However, the wage is not the only good that a worker gets if she chooses to work from home. Edwards and Field-Hendrey allow for joint production of work and household "commodities" in the home-based work context. They assume that there is "some level of household production (such as child or elder care) per hour when one is doing home-based work" (2002, p. 176). Their model is illustrated in Figure 1. It is outlined as follows: N is unearned income, L* is total time available, FCM are the fixed monetary costs of working at an onsite workplace (e.g., commuting costs), FCT are the fixed time costs that are incurred when working on site (e.g., commuting time), W_h and W_o are the wage offers for home-based and onsite work, respectively, and H is the monetary value of household production per hour of home-based work. They assume that $W_h < W_o$ and that FCM and FCT are zero when working at home. Also, for simplicity, H is considered to be zero when a person is out of the labor force. The budget constraint is BCDL*. If a person ends up at point B, she is out of the labor force. If she ends up on the line segment BC, she is a home-based worker and if she is on the line segment CD, she works onsite.

Fixed costs play an important role when choosing worksites, as seen in Figure 1. As the monetary and time costs of working onsite rise, the line segment CD moves down and to the left. This means that a person will be less likely to be an onsite worker, choosing instead to be a home-based worker or out of the labor force. The importance of the value of joint production of household commodities, H, on work-state choice, is also shown in Figure 1. A higher value of H will increase the probability that a person enters the labor force as a home-based worker. An increase in H has the same effect as a higher value of W_h. Since the option of home-based work reduces many of the costs of working, Edwards and Field-Hendrey state that "the presence of the home-based work option leads some women who would have chosen to be out of the labor force to enter as a home-based worker" (2002, p. 176).

How Can We Expand This Model to Learn About the Work-State Choice of People With Disabilities?

The theoretical basis for worksite choice for people with disabilities can be derived from the Edwards and Field-Hendrey model. People with disabilities, too, have greater costs of working than their non-disabled counterparts, similar to the differences that Edwards and Field-Hendrey found between married men and women. There is a deterrent effect of disability on the probability of working; those with disabilities are more likely than their non-disabled counterparts to be out of the labor force. Lack of accommodation might be a factor leading to this reduced level of employment. Transportation, mobility and accommodation issues affect the disabled more than the

non-disabled. Therefore, the fixed costs of working onsite may greatly influence persons with disabilities when deciding if and where to work.

Just like the married women in Edwards and Field-Hendrey's model, persons with disabilities can jointly produce "household commodities" when working at home. In addition to commodities encountered by many women, such as child care, a household commodity for a person with a disability could be having a doctor's or therapy appointment, or taking care of oneself when symptoms flare up. Home-based work could provide the flexibility and lower costs of work that could induce those with disabilities to enter the labor force. This is the reason why the Edwards/Field Hendrey model fits when looking at the labor force participation choice of persons with disabilities.

The Effect of the ADA on Worksite Decision

The Americans with Disabilities Act affected the employment situation both directly and indirectly. Title I mandated that employers must reasonably accommodate their workers either in the onsite workplace or by allowing them to work at home. The onsite workplace changed as a result of this legislation – wheelchair ramps were built, new entrance exams were created, and flexible schedules were allowed. The home-based worksite did not change because of the ADA, however; it just was suggested as a more viable accommodation option. The actual home-based worksites looked the same as they did in 1990. The home-based worksite had always been an accommodating option for people with disabilities. Both before and after the ADA, those with disabilities could perform household commodities, H, while working at home. Working at home also eliminated the fixed monetary and time costs associated with working onsite, FCM and FCT, respectively.

The passage of the ADA made the onsite workplace more accommodating, although it was still not as accommodating as the home-based worksite. Figure1 shows this change. Title I of the ADA addresses the treatment and accommodation of persons with disabilities in the workplace. Title II of the ADA addresses public transportation issues, such as accessible buses, trains and stations. One of the effects of Title II on those with disabilities is that it lowers the fixed time and monetary costs of transportation to an onsite workplace. People with disabilities who want to work onsite now have more transit options, and therefore their total transit bill will decrease in both time and monetary terms. Those who choose to work onsite still incur fixed time and monetary costs to working—they still must get to work and that costs time and money—but FCT and FCM have decreased to FCT₁ and FCM₁, respectively.

There is another change for onsite workers with disabilities because of the implementation of the ADA. Title I requires that employers "reasonably accommodate" their workers. One such accommodation could be a flexible schedule in order to go to regular doctor's appointments. Therefore, after the onset of the ADA, onsite workers with disabilities are allowed to do some joint production of commodities, O, while at work. This benefit gets added to the onsite wage in Figure 1. The ADA also may have increased H to H₁ since the atmosphere has changed to encourage the accommodation of

employees with disabilities. We can assume that O<H since the construct of onsite work will be almost always more constrained than the home-based option.

The Americans with Disabilities Act seemed to give the onsite workplace some of the benefits traditionally saved for those who worked at home while strengthening the benefits of working from home. In Figure 1, those who are at point B are out of the labor force. Those who are on the line segment BC' are home-based workers and those who are on the line segment C'D' are onsite workers. In Figure 1, C'D' increased more than BC', so it would seem that the disabled would be drawn in greater numbers to onsite work rather than home-based work, although both could increase. This is consistent with the numbers found in Table 1.

Conclusion

People with disabilities in the United States had greater access to employment in 2000 than in 1990. Both the Americans with Disabilities Act and increases in technology seem to have had a large hand in the positive change in the employment landscape for those with disabilities. Since the ADA was enacted in part to bring these individuals into mainstream society, this is good news for the effectiveness of this legislation. According to the IPUMS data, in 2000, persons with disabilities were more likely to be working and less likely to be out of the labor force than in 1990. Those with disabilities entered the onsite workplace in droves, but also were accommodated by working from home.

The vast majority of those who entered the workplace went to onsite jobs, but home-based work provided an important place as well. Home-based work does seem to be a viable, yet underutilized, choice for those with disabilities. As the digital age continues to thrive, there is a greater place for home-based work opportunities. The onsite world of work may always be dominant, but the "reasonableness" of working from home increases with every technological advance. "Qualified individuals" with a disability must be "reasonably accommodated" under the auspices of the ADA. However, the *Vande Zande* holding, which is based on "excessive absenteeism" cases, virtually eliminates the possibility that home-based work could be a "reasonable accommodation." This presumption was faulty in 1995, but it is certainly flawed now. Lifting the *Vande Zande* presumption could increase the employment opportunities of those with disabilities, aligning with the original intent of the ADA.

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References

The Americans with Disabilities Act of 1990, 42 U.S.C. § 12102(2).

Edwards, L. N., & Field-Hendrey, E. (2002). Home-based work and women's labor force decisions. *Journal of Labor Economics*, 20(1), 170-200.

- Franklin Delano Roosevelt. (n.d.) Retrieved from http://www.fact-archive.com/encyclopedia/FDR
- Gallagher, H. (1985). FDR's splendid deception. New York: Dodd Mead.
- Hotchkiss, J. (2003). *The labor market experience of workers with disabilities: The ADA and beyond.* Kalamazoo, MI: W.E. Upjohn Institute.
- Hypes v. First Commerce Corp., 134 F.3d 721 (5th Cir. 1998).
- Kaye, H.S. (2003). *Improved employment opportunities for people with disabilities*. (Disability Statistics Report 17). Washington, DC: U.S. Department of Education, National Institute on Disability and Rehabilitation Research.
- Kuenzi, J., & Reschovsky, C. (2001). *Home-based workers in the United States: 1997*. Retrieved from http://www.census.gov/prod/2002pubs/p70-78.pdf
- Kvorjak v. Maine., 259 F.3d 4 (1st Cir. 2001).
- Ludgate, K. (1997). Telecommuting and the Americans with Disabilities Act: Is working at home a reasonable accommodation? 81 *Minn. L. Rev.* 1309.
- Mason v. Avaya Communications, Inc., 357 F.3d 1114 (10th Cir. 2004).
- O'Brien, R. (2001). *Crippled justice: The history of modern disability policy in the workplace.* Chicago: The University of Chicago Press.
- Ruggles, S., Sobek, M., Alexander, T., Fitch, C. A., Goeken, R., Kelly Hall, P., King, M., Ronnander, C. (2004). *Integrated Public Use Microdata Series* [Machinereadable database]. Minneapolis: Minnesota Population Center [producer and distributor]. http://usa.ipums.org/usa/
- Schwochau, S., & Blanck, P. (2003). Does the ADA disable the disabled? -- More comments. *Industrial Relations*, 42(1), 67-77
- Smith v. Ameritech, 129 F.3d 857 (6th Cir. 1997).
- U.S. Department of Labor: Office of Disability Employment Policy. (2008). *Employment rights: Who has them and who enforces them*. Retrieved from http://www.dol.gov/odep/pubs/fact/rights.htm
- Valenza, M.A. (2004). Telework and the ADA: Is working at home finally a reasonable accommodation? 5 *U.C. Davis Bus. L.J.* 2, at http://bizlawjournal.ucdavis.edu/article.asp?id=547.

Vande Zande v. Wisconsin Department of Administration, 44 F.3d 538 (7th Cir. 1995).

Waggoner v. Olin Corp., 169 F.3d 481, 483 (7th Cir. 1999).

Endnotes

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¹ I have used Kristen Ludgate's insightful law review article, "Telecommuting and the Americans with Disabilities Act: Is Working at Home a Reasonable Accommodation?" 81 Minn. L. Rev. 1309 (1997), as a jumping off point when outlining the legal history of the "reasonableness" of home-based work as an accommodation for disabled workers under the ADA in Part I of this section. I am indebted to Ms. Ludgate for the overarching structure, factual content and legal analysis of this part.

² See Mason v. Avaya Communications, Inc., 357 F.3d 1114 at 1118 (10th Cir. 2004); Kvorjak v. Maine, 259 F.3d 4 (1st Cir. 2001); Waggoner v. Olin Corp., 169 F.3d 481, 483 (7th Cir. 1999); Hypes v. First Commerce Corp., 134 F.3d 721 (5th Cir. 1998); Smith v. Ameritech, 129 F.3d 857 (6th Cir. 1997)

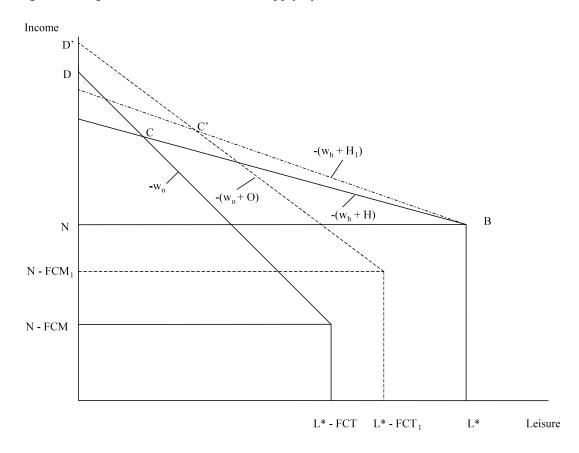
³ Part II of Section II is based on "Home-Based Work and Women's Labor Force Decisions" by Linda Edwards and Elizabeth Field-Hendrey. The "before-ADA" part of Figure 1 and the theory come directly from this article.

Table 1: Number and percentage of people with disabilities, age 25-55, by workstate, 1990, 2000

	1	1990		2000	
	Number	Percentage**	Number	Percentage**	
Total	5,521,148	8.1%	7,515,761	11.3%	
Home-based employee	26,693	6.0%	63,704	9.1%	
Home-based self-employed	55,184	5.2%	80,374	8.3%	
Onsite employee	2,737,924	5.2%	5,772,462	10.4%	
Onsite self-employed	466,086	8.4%	362,241	10.5%	
Out of the labor force	2,235,261	25.2%	1,236,980	20.1%	

^{**} This shows which percentage of the given workstate has certain disabilities. For example, in 1990, 25.2% of those out of the labor force had some sort of disability

Figure 1: Diagrammatic Model of Labor Supply by Worksite, Before and After the ADA*



* Solid lines – pre-ADA, Dashed lines – post-ADA

Source: Edwards & Field-Hendrey (2002)