I. INTRODUCTION
The fifth anniversary of the Americans with Disabilities Act of 1990 (ADA) is an appropriate time for reflection on the impact of this legislation. Yet a primary requirement for such reflection--systematic evaluation of hard information about the lives of persons with disabilities--is still lacking. Many critics of the ADA argue that there is little evidence showing that ADA-mandated measures have resulted in larger numbers of qualified persons with disabilities participating in the workplace.

No doubt, during the last five years dramatic changes have occurred in attitudes and behaviors toward individuals with disabilities in employment, governmental services, telecommunications, and public accommodations. These changes, however, have not been adequately documented and communicated. Adequate information is necessary to rebut the myriad myths and misconceptions about persons with disabilities, both in the employment context and elsewhere.

This article is based on information from an ongoing investigation of employment integration and economic opportunity under the act that seeks to foster meaningful and informed dialogue about the ADA; raise awareness about the lives, capabilities, and needs of persons with disabilities; and help forestall or minimize disputes about ADA implementation by providing an information base for improving communication. Begun in 1989, this investigation examines the
The research follows the lives of some 4,000 adults and children with mental retardation in Oklahoma and collects information on an array of social science, economic, and legal measures. This article highlights information from 1990 to 1994, reflecting changes in the participants' social and economic positions as indicators of progress.

The findings presented in this article are descriptive and exploratory, documenting and charting trends prior to and after Title I's implementation. In the investigation, two general types of outcome measures are used: employment integration and economic opportunity. A descriptive model or framework for the study of employment integration and economic opportunity appears in Figure 1.

The research model uses several measures to identify trends in employment integration and economic opportunity. These "predictor" variables include assessments of the participants' personal backgrounds, capabilities and qualifications, inclusion and empowerment in society, and perceptions of ADA implementation and rights.

Assuming familiarity with the ADA, Part II describes the broader relevance of the investigation to emerging questions under Title I. Part III describes the investigation's core findings, and Part IV examines the policy and practical implications for future investigation of employment integration and economic opportunity under the ADA.

II: ASSESSING TITLE I OF THE ADA

Title I prohibits a covered entity from discriminating against a qualified person with a disability in any aspect of employment. Under Title I, discrimination includes the failure to provide reasonable accommodations to a qualified person with a disability, unless providing such an accommodation would create an undue hardship.

Although the Equal Employment Opportunity Commission (EEOC) and developing case law have provided guidance intended to clarify what discrimination means with respect to ADA compliance, much ambiguity remains. In-depth examination, via quantitative and qualitative study, of the meaning and scope of Title I's antidiscrimination provisions must be a central goal of future study if effective implementation is to continue. In March 1995 the EEOC issued clarifying guidelines for the statutory definition of disability to stimulate this process.

Covered persons with disabilities encompass a wide range of individuals. The now familiar definition--a person with a disability has a known physical or mental condition or impairment that "substantially limits major life activities," "a record of" such a condition or impairment, or is "regarded as" having such a condition or impairment--has spawned a wide range of
unanticipated legal claims, some justified and some not.

The framework in Figure I helps identify many of the variables that need to be studied to understand the nature and impact of an individual's particular disability and its relation to employment opportunity and advancement.

"Disability" is viewed as a function of a person's skills (e.g., highlighted in Figure 1 as "Capabilities & Qualifications") and their environment (e.g., highlighted in Figure 1 as "Inclusion Factors" and "Empowerment Factors").

Questions requiring systematic study include the following:

1. What constitutes a substantial limitation on the major life activity of work (e.g., quality of health status alone)?
2. How do substantial limitations on major life activities change over time for persons with different disabilities and with varying job skills?
3. In what ways do individual empowerment strategies (e.g., self-advocacy) enhance rights and advancement in the workplace?
4. How do the living environments (e.g., independent versus segregated settings) of individuals with disabilities support their ability to attain and retain work?
5. What emerging employment opportunities and barriers face persons with severe disabilities?

The concept of a "qualified individual with a disability" is central to the ADA's goal of economic equality. An individual with a disability is "qualified" if that person satisfies the prerequisites for the job--such as educational background or employment experience--and can perform "essential

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12 See, e.g., Helen L. v. Didario, 46 F.3d 325 (3d Cir. 1995), 19 MPDLR 173 (Title II of the ADA requires services to be provided for persons with disabilities in most integrated community setting possible).
In establishing employment "qualifications" and essential job functions, the applicant's experience and skills are considered regardless of the provision of accommodations. For many persons with disabilities, however, employment decisions often are based on myths about individual potential. Adequate information about the relation between the type of disabling condition and the skills required to perform a job or work function is emerging. This investigation explores the concept of individual job skill and other factors (e.g., empowerment and inclusion) necessary for interpreting the term "qualified individual with a disability" in the employment context.

Another area for study involves the enforcement mechanisms of Title I, which are guided primarily by reliance on covered entities good faith efforts at compliance (e.g., with monitoring by the EEOC and the Department of Justice). Absent clear enforcement standards, attempts at "proactive" compliance may be enhanced by informative study rather than solely by retroactive interpretations of the ADA on a case-by-case basis.

Long-term study is needed to address enforcement-related questions such as the following:
1. How will "the shadow of the law" affect employers' ability to maintain a qualified work force and economic competitiveness?
2. In what ways will the ADA enhance employment opportunities and economic growth for qualified women and men, younger and older workers, workers from different ethnic groups, and workers with varying disabilities?
3. How will structural labor market forces and an increasingly global economy affect employment integration and the rights of persons with disabilities, both in this country and abroad?
4. How will the EEOC and the courts assess what constitutes minimal compliance with the law?
5. What are the perceptions and the realities of the ADA's effectiveness, implementation, and compliance, based on the experiences of persons with various disabilities?

III: ASSESSING EMPLOYMENT INTEGRATION AND ECONOMIC OPPORTUNITY: CORE FINDINGS
Further study in many areas besides those mentioned in this article is needed for a full understanding of employment integration and economic opportunity under the ADA. However, the following guiding principles have emerged:
1. The study of disability requires interdisciplinary analyses (e.g., from the perspectives of medicine, law, economics, psychology, etc.).
2. Although disability is a function of limitations in skills and/or capabilities, it must be

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studied within the context of the work and living environments of the person with a disability.

3. All disabilities coexist with individual strengths and capabilities.

4. With appropriate supports, the functioning of qualified persons with disabilities improves.\(^\text{17}\)

5. Disability is a natural part of the human experience.\(^\text{18}\)

In light of these assumptions, this part describes the investigation's five core findings.

**Employment Integration**

Figure 2 shows changes in the participants' attainment of integrated employment from 1990 to 1994, illustrated separately for men and women.\(^\text{19}\)

![Figure 2: Percentage of Persons in Integrated Employment](image)

Although from 1990 to 1994 the majority of the participants show no change in their employment status, more than one-third move into more integrated employment settings. The total proportion of individuals engaged in integrated employment nearly doubles, from 6 percent in 1990 to 11 percent in 1994. In addition, Figure 2 shows that over time men, as compared to women, attain higher levels of integrated employment. Relative unemployment levels for all participants also decrease dramatically, from 39 percent in 1990 to 21 percent in 1994.\(^\text{20}\)

Figure 3 shows that, for minority participants, decreases in unemployment levels from 1990 are

\(^{17}\) See American Assoc. on Mental Retardation, Mental Retardation: Definition, Classification, and Systems of Support 1 (1992).


\(^{19}\) Four categories of employment type are arranged from less to more integrated as follows: (1) no employment; (2) sheltered employment, a program of work or training in a nonintegrated group setting, wages are usually half of the minimum wage; (3) supported employment, a competitive job placement program with a job coach; and (4) competitive employment, job placement is made without a job coach.

\(^{20}\) During this period the average unemployment rate for Oklahoma was approximately 6%, and the national unemployment rate 6.6%.
particularly substantial.

Individuals with disabilities with higher capabilities and qualifications, particularly those with better job skills and health status, are more likely to attain integrated employment in 1994. Analysis of the inclusion factors noted in Figure 1 shows that those in integrated employment also are more likely to reside in integrated community settings. This finding supports the view that for many persons with disabilities, independent living is crucial for full inclusion in society.21

In addition, individuals with disabilities in integrated employment are more satisfied with their work and life activities. This finding is consistent with those of other studies showing that competitive employment often results in increased self-esteem for persons with disabilities.22 Moreover, individuals with disabilities in integrated employment score higher on the empowerment factors identified in Figure 1, tend to be more involved with self-advocacy, and receive more support from their families and the government for their employment activities.

**Economic Growth and Opportunity**

The investigation examines participants' earned income in 1994 and changes in their gross income from 1990 to 1994 (e.g., evaluating income from employment and other sources such as Supplemental Security Income, while controlling for inflation). From 1990 to 1994, gross income rises for all participants.

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Figure 4 shows that in 1993 and 1994, participants in integrated employment earn consistently higher levels of income, and men in this category earn more income than women.

Individuals with higher incomes in 1994 score higher on the capabilities and qualifications measures (e.g., show higher job skills and better health status). Also, consistent with the findings for employment integration, individuals with higher incomes are more likely to live in community settings and to report greater choice and satisfaction with their jobs and lives. They also report greater levels of empowerment, are more involved in self-advocacy, and receive greater support from their families and the government.

**Individual Growth**

The investigation uses two measures to examine individual capabilities and qualifications (e.g., job skills and general health status) that reflect one working definition of the term "qualified" within the meaning of Title I. Contrary to popular myth, from 1990 to 1994, individual job skills and health status improve substantially. ²³

Inclusion in the workplace of qualified persons with disabilities is another major goal of Title I. Inclusion is measured in two ways: by degree of independence in living (i.e., the integration aspect), and by reported satisfaction and choice in employment and daily life (i.e., the consumer measure).

Figure 5 shows that from 1990 to 1994, the percentage of individuals in community-based living (e.g., group homes, family living, or independent living) rises. Over time, women show relatively higher numbers of placements in community living settings than men, as do nonminorities relative to minorities.

Separate analyses show that the proportion of individuals living independently in their own homes in the community rises more than tenfold, from 2 percent in 1990 to 26 percent in 1994. Perceptions of satisfaction and choice in work and daily life also improve significantly during this period.

Several measures assess the concept of empowerment. The self-advocacy measure reflects the participants' contact and participation with these programs from 1990 to 1994. Figure 6 shows that the proportion of participants involved in self-advocacy activities almost doubles during that period, from 18 percent in 1990 to 29 percent in 1994.

Women show more involvement over time in self-advocacy than do men. Also, individuals with higher job skills are more involved in self-advocacy.
As their work and daily lives become more integrated and independent, these individuals appear to focus greater attention on empowerment through self-advocacy. Further analysis of trends in self-advocacy for persons with different disabilities is warranted, because the movement's major objectives are closely related to the goals of the ADA--namely, support for independent living, fair wages, empowering changes in laws, and equitable modifications to entitlement programs.

The findings also show that from 1990 to 1994, family and governmental support improve, reflecting increased involvement by families in mainstream education, independent living, and competitive employment. Findings of other studies bolster the view that the use of cost-effective and "natural supports" in homes, employment, and communities empowers persons with disabilities. Similarly, education and training, which are critical for employment integration and economic opportunity, are becoming increasingly individualized and coordinated across many disciplines for persons with different disabilities.

**Black Hole Effect**
Historically, millions of qualified individuals with disabilities have been segregated from competitive employment--confined to a "black hole" of nonintegrated work settings--leading to a cycle of failure and frustration. Figure 7 highlights the black hole finding that many qualified persons with disabilities stagnate in nonintegrated employment settings.

![Figure 7](image)

Figure 7 displays the relative percentage change in participants' employment status from 1990 to 1994. Employment is categorized as nonintegrated (e.g., defined as no employment or employment in a sheltered workshop) or integrated (e.g., as supported or competitive employment).

Eighty-six percent of participants in nonintegrated settings in 1990 remain in those settings in 1994 (i.e., the black hole effect). The comparatively lower "survival rates" for participants in

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integrated employment amplifies the problematic trend (e.g., only 48 percent of those in integrated settings in 1990 remain in this category in 1994).

Figure 7 also shows that 52 percent of the participants in integrated employment in 1990 regress to nonintegrated settings by 1994, whereas only 14 percent of those in nonintegrated employment in 1990 move to integrated employment by 1994. The findings are consistent with studies suggesting that persons with disabilities experience high levels of movement in and out of the competitive labor market. Empirical study is crucial for assessing the relationship between effective ADA implementation and long-term black hole unemployment trends for persons with disabilities.

Perceptions of Access and ADA Effectiveness

To assess views of civil rights and of access to employment and daily life, the investigation explores the participants' perceptions of access to employment (ADA Title I issues); to education, training, and public transportation (ADA Title II issues); and to public accommodations (ADA Title III issues).26

The findings in Figure 8 below suggest that from 1990 to 1994, the participants' perceptions of their rights and access to work and daily life have fluctuated.

From 1990 to 1992, perceptions of the effectiveness of the ADA and of access to society improve. Beginning in early 1992, however, positive perceptions of ADA-related rights and of access to society decline. By 1994, the findings are almost comparable to those reported in 1990.27

26 According to L. Harris & Assoc., Survey of Americans with Disabilities 37 (1994), more persons with disabilities report access to employment opportunities has improved, as opposed to regressed, since 1990 (44% vs. 28%), public transportation has become more accessible (60% vs. 13%), and public facilities have become more accessible (75% vs. 6%).

27 Although the findings show dramatic changes from 1990 to 1994 on many of the measures, after 1994 changes have occurred at a less dramatic pace. See T.D. Cook & D.T. Campbell, Quasi-Experimentation: Design and Analysis Issues for Field Settings (1979).
Overall Power of the Model
Exploratory regression analyses are used to summarize the relationships between the set of predictor measures noted in Figure 1 (e.g., inclusion, empowerment, etc.) and employment integration and earned income level in 1994. The analyses use ten variables to predict employment integration and earned income in 1994: age, gender, race, job skill level, health status, living arrangement, self-advocacy level, family and government support, educational goals, and reported ADA effectiveness.

The findings illustrate how changes in the predictor measures affect employment integration and income level. When the ten measures are considered individually and in combination, the predictive value of the analyses (i.e., the R2 for multiple regression purposes) is statistically significant and substantial. The measures explain a good deal about variations in employment integration and economic opportunity for the individuals in this investigation—in regression terms, accounting for approximately 24 percent of the variation in 1994 employment category, and 56 percent of the variation in 1994 earned income.

The individual findings of the analyses show that participants in integrated employment in 1994 tend to be younger, have higher job skills, and reside in more integrated community settings. Although several combinations of the ten measures predict employment status, individual job skill is the best single predictor of the ability to attain and retain employment (i.e., when holding constant the other variables in the model).

Similarly, several measures predict 1994 earned income: Male participants, with higher job skills, who live in more integrated settings, more involved in self-advocacy, and with fewer vocational training goals tend to earn more income in 1994. Once again, individual job skill is the strongest single predictor of earned income.

IV: IMPLICATIONS
This article describes an investigation of employment integration and economic opportunity under the ADA for a particular group of individuals with disabilities. One long-term goal is to refine the descriptive model in Figure 1 to include persons with other disabilities, living in rural and urban settings and participating in different types of employment.28 The implications of the investigation's five core findings for the disability community, employers, policymakers, and courts are highlighted below.

1. Employment Integration
In the United States, current estimates of unemployment levels for persons with disabilities range from 50 to 90 percent.29 The lack of access to competitive employment is a primary reason for discrimination against qualified persons with disabilities. The implementation of Title I is a major policy step toward reducing chronic unemployment for millions of qualified persons with disabilities.29

disabilities. In the long-term, Title I may afford qualified individuals with disabilities the opportunity to experience job stability and advancement without hitting a "glass ceiling."

The findings show that those individuals attaining integrated employment in 1994 demonstrate a high degree of job skill (i.e., they were qualified) and independence. Perhaps, not surprisingly, the most qualified participants in competitive employment often are those most likely to report limited access to work and daily life activities (see Figure 8). Despite being subjected to the continued reality of structural and attitudinal discrimination, these post-ADA pioneers may be even more likely to assert their ADA rights in the future.

2. Economic Opportunity
Title I is intended to foster integrated employment opportunities that pay fair wages to qualified employees with disabilities. The findings support the conclusion others that earned income is crucial to the satisfaction and quality of life of persons with disabilities. Prior research also has found significant wage disabilities between men and women, with and without disabilities, in comparable jobs. Over time, these income disabilities act as disincentives to work for many qualified individuals with disabilities. The findings presented this article reflect this trend, showing that participants with higher earned incomes in 1994 report more limited access to competitive work.

3. Individual Growth
Several findings are of particular relevance to implementation and policy: The proportion of participants involved in self-advocacy programs increases; self-reported satisfaction with work and daily life increases; reported health status improves; and the proportion of participants living independently in the community rises more than tenfold. These trends illustrate progress various individual, economic and social indicators related to the goals of the ADA, such as equal opportunity, access, and satisfaction with work and daily life.

4. Black Hole Effect
Most of the participants not employed or employed nonintegrated settings in 1990 remain in these settings 1994, regardless of their job skill levels. The black hole trend reflects the problems of chronic unemployment underemployment facing many qualified persons with disabilities. Enhanced strategies are needed to help millions of qualified persons with disabilities enter the work force.

In addition, job retention and advancement strategies are needed to help individuals with disabilities keep jobs and achieve their full potential. Senator Tom Harkin, a sponsor of the ADA, has said that the challenge facing America in the next century is to reach the millions qualified individuals with disabilities stuck in the black hole of unemployment.

5. Perceptions of Access and ADA Effectiveness
From 1990 to 1994, perceptions concerning accessibility to work and daily life fluctuate. From

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31 Harris supra endnote 26 (adults with disabilities perceive insufficient finances, lack of full social life, and inadequate health insurance to be serious problems).
32 Harkin supra endnote 18 at 936.
the time the ADA was signed into law until the date Title I became effective—from 1990 to 1992—the act's reported effectiveness increases. High expectations for a new and emerging civil rights era are apparent. Barriers to work and society are reported to be declining.

From 1992 to 1994, however, a different picture emerges. Starting early in 1992, participants' perceptions of their ADA-related rights and access to society drops. By 1994, reported levels for this measure are almost comparable to those reported in 1990, two years before Title I was effective.

These trends suggest that with the ADA's passage—especially during the two-year "honeymoon" period from 1990 to 1992—expectations for a new civil rights era for people with disabilities were high. In just two years, however, many of the intended beneficiaries of the ADA believe that it has not yet fulfilled its promise of assuring the full inclusion and empowerment of all persons with disabilities.

It is too early to make definitive conclusions about this trend. But we must ask ourselves whether we as a society are keeping the promises reflected in the ADA, for inclusion, empowerment, and equal opportunity to work for qualified individuals with disabilities.33

**Power of the Research Model**

Assessing true employment integration is, of course, a monumental task. No law, not even one as far-reaching as the ADA, can be the sole reason for social change. Researchers must assess whether actual change or merely the appearance of change is occurring as a result of the ADA. The research and the core findings reported in this article cannot yet fully inform policymakers, researchers, the disability community, employers, and others about many of the complex causal issues related to the ADA's implementation.

The individual measures identified in Figure 1, in combination and by themselves, provide a useful starting point for understanding the elements of successful employment integration and economic growth for persons with disabilities. Much more remains to be learned, however, about this research model and others. The primary means for addressing the emerging questions is to replicate existing studies and to develop new ones.

The core findings illustrate that for many of the participants with disabilities, employment integration is a function of experience in, and attempts at, obtaining competitive work. At the same time, the findings show the black hole stagnation facing many participants, and reflect the reality that, after the passage of the ADA, many qualified persons with disabilities remain subject to the same economic conditions, cycles, and pressures as persons without disabilities.

The findings support previous studies showing rising income levels for persons with disabilities since the mid-1980s.34 Gains in income for persons with disabilities, however, often are unevenly distributed, with women and nonwhites remaining relatively worse off. The National Council on Disability finds that women with disabilities, and individuals with disabilities who

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33 Wehman supra endnote 29 at 255.
belong to minority groups, often experience double or even triple discrimination, and that discerning the causes of this discrimination is difficult.\(^{35}\)

Research by others shows that low-skilled workers with disabilities faced a declining trend in labor market opportunities in the 1980s.\(^{36}\) Interdisciplinary study addressing future economic factors and structural changes in the labor market that influence employment integration and economic opportunity for persons with and without disabilities is needed.

Many other economic and social benefits and challenges associated with the ADA remain to be discovered and documented. Adequate economic data concerning the effects of this law on the population of young, qualified persons with disabilities able to join the work force is not available. This investigation highlights an "emerging work force" of young, qualified participants with disabilities, reflecting a new generation of persons who have received mainstream educations and whose families have advocated for their rights.

Empirical information is emerging on the long-term economic value of antidiscrimination practices by employers. In a recent two-year study on the ADA practices of Sears, Roebuck & Co.--a company with 350,000 employees, 20,000 of whom are considered persons with disabilities--the average cost of providing reasonable accommodations to qualified workers with disabilities was only $121.\(^{37}\) The bottom-line benefit to Sears of employing workers with disabilities far exceeded the costs.

Detailed information also is becoming available on the costs and benefits of accommodating persons with mental disabilities.\(^{38}\) This information provides feedback to employers and potential employees about effective ADA implementation strategies in different business sectors, thereby further reducing costly litigation on the subject.

Initial analyses of the types of complaints filed with the EEOC to date, show that the most common type of Title I claim filed with the EEOC involves the discharge or termination of individuals with back and spine impairments.\(^{39}\) Roughly another one-third of Title I claims involve a mental or neurologic disability.\(^{40}\) In contrast, only a small percentage of claims involve sensory disabilities (e.g., visual or hearing impairments) or serious, life-threatening conditions (e.g., HIV disease, cancer, or diabetes). Moreover, most Title I claims involve traditional employment law litigation issues, whereas a smaller number involve issues of work-force entry and accommodation.

**CONCLUSION**

On the fifth anniversary of the ADA, the majority of qualified working-age Americans with disabilities remain unemployed. Despite encouraging advances in job placement, education, and

\(^{35}\) ADA Watch supra endnote 5 at 63.

\(^{36}\) National Academy of Social Insurance supra endnote 2 at 109-10 ("workers with limited skills who also have disabilities are doubly disadvantaged").

\(^{37}\) Blanck supra endnote 15.


\(^{39}\) Blanck supra endnote 14 at 103-104.

training since the ADA's enactment, the unemployment of many qualified persons with disabilities is a problem that remains unresolved.

To address these issues, President Clinton has formed a task force to examine the implementation of effective disability policy. Senator Bob Dole is planning to introduce a bill in Congress to establish a National Commission on the Future of Disability charged with examining and evaluating America's disability policy for the next century. These efforts reflect the belief that disability policy--as set forth in the ADA and other laws--must be studied, monitored, and updated.

Recently, Senator Dole wrote, "The ADA is an important milestone, but it is certainly not the end of disability policymaking." Great progress has been achieved in the first five years under the ADA. On its fifth anniversary, important work and challenges lie ahead.

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41 R. Dole, "Are We Keeping America's Promise to People with Disabilities?--Commentary on Blanck," 79 Iowa L. Rev. 925, 928 (1994).