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### Rural Public Access and the Americans with Disabilities Act: Measuring Progress in Hamilton, Montana

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### Rural Public Access and the Americans with Disabilities Act: Measuring Progress in Hamilton, Montana

The Americans with Disabilities Act (ADA) of 1990 is arguably the most significant single effort to enhance community participation of people with disabilities (Brown, 2001), in part by promoting physical access to public places and commercial facilities. Specifically, ADA Titles II and III provide disability advocates with legal tools for promoting access to public places.



Despite the significance of the ADA legislation, Batavia (1992) points out that the ADA was “passed without documentation of need” and that “no baseline data exist to assess the implementation of the ADA.” Historically, advocates have monitored the implementation and outcomes of the ADA by using a legal model to track numbers of complaints filed, by whom, reasons for complaints, and how complaints were resolved. This incident-based approach doesn’t systematically evaluate ADA compliance across communities, however. Without a meaningful tool to provide baseline data, we can’t really measure progress in achieving access goals – just changes in complaints.

Many small, rural communities have aging infrastructures, and few have advocacy groups dedicated to implementing the ADA (Innes, et al., 2000). Currently available assessment tools and guidelines don’t ask the questions or offer the solutions rural communities need to make progress.

One way to collect data is to observe the accessibility of places and track how they change over time. While researchers can’t observe all places, they can use *statistical sampling* to describe a population based on a smaller number of observations. This report describes RTC: Rural’s pilot phase of a project to develop a way to sample and measure accessibility across rural communities.

**Method:** This study looked at places of public commerce “operated by a private entity, whose operations affects commerce.” These include retail businesses, location-based consumer services (e.g. salons, physical therapy clinics), entertainment facilities (e.g. theaters, bars, restaurants), and financial institutions (e.g. banks, check cashing businesses).

We chose Hamilton, Montana for the pilot study because of its size (population: 4,059) and convenient location in the Bitterroot Valley on U.S. Highway 93. It is the county seat of Ravalli County. RTC: Rural researchers used a business classification coding system to identify Hamilton businesses that do substantial business with the public (e.g. retail businesses). We provided this list of business codes to a national business directory publisher, which then matched the codes to Hamilton businesses in its database and produced a list of businesses appropriate for our study.

We excluded locations not covered by the ADA (e.g. private homes or churches); government buildings covered by other legislation (e.g. federal buildings covered by Section 504 of the Rehab Act); locations with limited public access (e.g. schools, medical providers, professional service providers, manufacturers/wholesalers); and businesses not dependent on a specific location (e.g. lawn care services, plumbers). Based on preliminary power analyses, we randomly selected 42 of 266 businesses appropriate for observation.

**Measures:** The *Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities* (ADAAG) are the standards for judging the accessibility of businesses. The ADAAG is comprehensive, but cumbersome. Its manual has 142 pages of building codes that require precise measurement, such as this example about doorways:

4.13.5 Clear Width. Doorways shall have a minimum clear opening of 32 in (815 mm) with the door open 90 degrees, measured between the face of the door and the opposite stop. Openings more than 24 in (610 mm) in depth shall comply with 4.2.1 and 4.3.3.

Although the ADAAG is the touchstone for assessing legal compliance with the ADA, it is not a practical tool for calculating a community accessibility score. The ADAAG uses yes/no compliance questions which aren't intended for comparison across businesses. Applicable ADAAG codes vary widely from one business to the next.

Our approach was to develop a scaled rating system for major access features that apply to a wide range of public businesses. We reviewed the ADAAG guidelines, and solicited input from a focus group of advocates and individuals with disabilities. We identified six major features of business accessibility and assigned a 4-point rating scale (from least accessible to most accessible) to each feature. Table 1 lists these major access features.

**Table 1: Access Features**

Access Features	Description
Designated Parking Availability	Distance of designated parking from the business.
Parking Accessibility	The extent to which designated parking accommodates a driver or passenger with a disability.
Safe and Accessible Route to Entry	The extent to which the route to the business is accessible and barrier-free.
Accessible Entry to the Business	The extent to which the entry to the business meets ADAAG guidelines.
Door and Doorway Accessibility	The extent to which the business's doorway meets ADAAG guidelines.
Accessibility of Business Interior	The extent to which a person using a mobility device can move about within the business.

The measure excluded some important access features that weren't available at all businesses or were too difficult to assess. For example, we didn't evaluate restroom accessibility because many small businesses don't provide restrooms for customers. Restroom evaluation also might require a team of both male and female observers, and would significantly increase observation time.

**Procedures:** We used a standard protocol to observe the selected businesses: 1) identify each business's main entrance; 2) locate parking spaces to be observed; 3) assess the route to each business's entrance; 4) judge the accessibility of each business's entry; and 5) evaluate the accessibility of each business's interior public space.

**Results:** Of 42 businesses selected, 13 could not be observed for the reasons listed in Table 2.

Table 2. Reasons for not observing selected businesses	Number of businesses
Could not locate the business	2
Business was located inside a personal residence	2
Business had moved	2
Business had closed	1
Business was located beyond 1 mile of the city limits	6

We averaged the scores for the six access features of the remaining 29 businesses to achieve a "snapshot" of community accessibility. Table 3 provides mean, median, standard deviations, and 95% confidence intervals for each accessibility feature.

Table 3. Access Feature	Mean	Median	Std. Dev.	95% Conf. Int.
Designated Parking Availability	3.1	3.0	1.13	(2.6, 3.5)
Parking Accessibility	2.8	3.0	1.15	(2.3, 3.2)
Safe and Accessible Route to Entry	3.3	4.0	.97	(3.0, 3.7)
Accessible Entry to the Business	3.2	4.0	1.02	(2.9, 3.6)
Door and Doorway Accessibility	2.7	3.0	.55	(2.5, 2.9)
Accessibility of Business Interior	3.6	4.0	.70	(3.3, 3.9)

The scores for each access feature were "**benchmarked**" by a detailed description of observable characteristics. For example, using the median scores, a score of 3 for *Designated Parking Availability* indicates that designated parking is available within one city block of the business. A score of 3 for *Parking Accessibility* indicates that the designated parking space includes a marked area at least five feet wide for a ramp to extend and a driver or passenger to use after exiting the vehicle. A score of 4 for *Safe and Accessible Route to Entry* indicates a clear, accessible, and safe route (e.g., a curb cut to a sidewalk with a firm and smooth surface to the business entry). A score of 4 for *Accessible Entry to the Business* indicates that the threshold is less than 1/2" high and/or there is an easily-negotiated ramp. A score of 3 for *Door and Doorway Accessibility* indicates the door has a levered handle and a medium pull weight. A score of 4 for *Accessibility of Business Interior* indicates that a person using a wheelchair, walker, or scooter can navigate more than 90% of the public area inside the business.

Using a standard rating scale allowed us to calculate an overall score by simply adding the scores across categories. Aggregate scores ranged from 6 to 24 points. The average business in Hamilton, Montana, has a moderate degree of accessibility (overall score of 19 or average score of 3.17 for the access features). Unfortunately, average scores can hide some real problems. Four of the 29 businesses were inaccessible to a person using a mobility device because the routes to, or entries into, the businesses were impassable. Nine businesses had doors that required another person's assistance to open (e.g. doors had heavy pull weights and/or round doorknobs, or doorways had limited room for maneuvering). Also, five businesses had no designated accessible parking available within two blocks or .1 mile. These are both private and city access problems.

**Discussion:** From this pilot research we learned many lessons about the sampling frame and accessibility measure. We didn't expect so many businesses in our selected sample to be outside the city limits, closed, relocated, or in personal residences. Future samples require a list of alternate businesses so we can observe enough locations to make reliable inferences about the community.

In terms of the measure, we concluded that we needed more information about city versus private infrastructure in order to make meaningful accessibility recommendations. Specifically, routes to a business's entry may include city infrastructure (i.e. sidewalks) and a business's privately maintained infrastructure (i.e. a pea gravel path to the entry). A better measure would allow researchers to distinguish these features

**Conclusion and Next Steps:** Based on this pilot research, we have refined the sampling scheme and accessibility measure, developed and tested a training protocol for conducting observations, and identified a team of observers. We are currently conducting an accessibility assessment of small incorporated Montana towns. Analysis of these data should be available in Autumn, 2008. We hope to use access feature scores and aggregate scores to compare communities on overall accessibility, and to report on a baseline of accessibility in small towns in the state.

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