

CONSUMER GUIDE:
**Taking Action on the
Issue of Handicapped Parking**

Yolanda Suarez de Balcazar and Stephen B. Fawcett



This publication was prepared by: The Research and Training Center on Independent Living and also The Center for Public Affairs at The University of Kansas

Published by The Research and Training Center on Independent Living (RTC/IL), The University of Kansas, Room 4089 Dole Center, 1000 Sunnyside Avenue, Lawrence, KS 66045-7555, Voice: (785) 864-4095, TTY: (785) 864-0706, Fax: (785) 864-5063, email: RTCIL@ku.edu

Funds for this publication were provided, in part, by a grant to the RTC/IL at the University of Kansas from the National Institute of Handicapped Research, Grant #G008006928.

TABLE OF CONTENTS

Acknowledgements

Introduction

Chapter 1	The Consumer Action Method and Its Evaluation
Chapter 2	Introduction to the Citizen Group
Chapter 3	Overview of the Action Plan
Chapter 4	Identify Resources for Taking Action
Chapter 5	Study the Problem
Chapter 6	Choose Settings for Action
Chapter 7	Document the Problem
Chapter 8	Taking Action on Inadequate Spaces
Chapter 9	Taking Action on Parking Violations
Chapter 10	Evaluate the Effects of Action
Chapter 11	Taking Follow-Up Actions as Necessary

APPENDIX 1: Self-Training Manual for Observing Violations at Handicapped Parking Spaces

APPENDIX 2: Designing Handicapped Parking Spaces: Important Characteristics to Consider

APPENDIX 3: Policy Research Report

ACKNOWLEDGEMENTS

The authors would like to acknowledge several members of Independence in Action who contributed to the development of this manual. In particular, we wish to thank Barbara Lumley, Lois Jones, Arlen Flanagan, Wendy Balfour, Margaret Walker, and Sherry Axline. Our appreciation is also extended to the staff of Independence Inc. for their collaboration. Finally, we appreciate the cooperation of the business community of Lawrence, Kansas, for its prompt responses to the needs of people with disabilities.

PART I:

Introduction: Toward Effective Consumer Action of Handicapped Parking Issues

Every time I go shopping, I'm afraid that I won't find a good place to park. I'm afraid that I'll hurt myself and that nobody is going to help me get into the store. I wish some day I could go out without all these fears.

To be able to get to the grocery store or pharmacy, to be able to park within a reasonable distance from a building, to get store owners to create adequate handicapped parking spaces, to secure enforcement of local handicapped parking ordinances — these are some of the goals involved in consumer actions for handicapped parking.

Many citizens with disabilities share a deep concern about handicapped parking. Research has shown parking is a problem for consumers in cities and towns as diverse as rural Viburnum, Missouri, and metropolitan Los Angeles, California. Throughout the country, groups of citizens with disabilities are coming together to work on the problem of handicapped parking.

The purpose of this *Consumer Guide* is to assist citizen groups in acting on the issue of handicapped parking in their local communities. We assume that people with and without disabilities already bring a great deal of knowledge and skill to these self-help efforts. We also assume that with information about successful approaches, their efforts can be even more effective.

Chapter 1: The Consumer Action Method and Its Evaluation

This guide describes a method to help consumers act on local handicapped parking issues. It is based on the experiences of several communities in discussing the issue and a year-long action project by a Consumer Advisory Committee in one of the cities. In addition, the effectiveness of some parts of the method — obtaining upright handicapped parking signs and using a police crackdown to enforce a local ordinance — were evaluated in controlled experiments.

How Was the Problem Researched?

The issue of handicapped parking was identified as a problem in every community with which we have worked. Using the Disabled Citizens' Concerns Report Method, a systematic data-based process for identifying the strengths and problems of various communities and helping them to set agendas for change, citizens with disabilities consistently rated the parking issue as high in importance and low on satisfaction. Parking is an important issue whether a disabled person lives in a rural town in the Midwest (such as Viburnum, Missouri) or a metropolitan area on the coast (such as Los Angeles, California).

What Is the Action Method?

This guide outlines a nine-step plan for taking action on the issue of handicapped parking. It

is based on the experiences of Independence in Action, the Consumer Advisory Committee for Independence, Inc., an independent living center (ILC) in Lawrence, Kansas.

The method consists of nine steps involved in understanding and documenting the nature of the problem in a community, identifying sites and resources for action, implementing action, and determining the effects of actions taken. Two of the more critical action steps — installing upright handicapped parking signs and obtaining police cooperation on issuing citations — are described in more detail.

How Was the Method Evaluated?

Two aspects of the action plan — installing upright handicapped parking signs and police crackdown on violators — seemed to be particularly important. The authors conducted experiments to evaluate each of these features. In the first experiment, the effects of posting upright signs next to spaces that previously had only ground signs were examined. Results showed a mean of 20% of inappropriate use before the sign and 4% inappropriate use after a 4-foot upright sign was installed for one site. However, it appears that the effects of signs may be temporary, since some spaces with upright signs showed violation levels as high as 28% after a long time period.

In a second experiment, the effects of a citywide police crackdown on violators was examined. The results of this 8-day crackdown suggested that the crackdown was effective in reducing the percentage of inappropriate use of handicapped parking spaces from a mean of 26% to 3% after the crackdown, and 0% during follow-up. This research suggests that the recommended methods have a good chance of success.

Chapter 2: Introduction to the Citizen Group

Citizens with disabilities working together can make a difference on issues such as accessible parking. Whether efforts are sponsored by a consumer advisory committee for an ILC, a mayor's commission on disabilities, or an advocacy group, citizens with disabilities can bring about positive changes in their local communities.

Is Your Organization Suited to This Action Role?

Has your organization been interested in the parking problem? Are there volunteers with the skills and time to take action? Do some members or contacts of members have good relations with the business community? With local government officials? With the police department? Are others in the community working on or supportive of this issue? These are some questions the group should discuss before starting the action plan.

What Can You Expect From Using This Guide?

This Consumer Guide provides information on how to conduct action on the issue of handicapped parking. The description of each step and an illustration from other communities' experiences should be helpful to plan your group's efforts. Consumers who study this guide should be able to study their local problem, collect data on the extent of the problem, present proposals to install upright signs to private businesses, present requests to police for enforcement of violations, and monitor the effects of group actions.

How Much Time Will Be Required?

The length of time required to take action will vary with the type and extent of the problem, the level of commitment from group members, and the extent of cooperation from local businesses and police.

To learn the information and skills in this guide requires about 6 hours. The group's efforts may require the time of two to six volunteers for several hours a week. A comprehensive action campaign may take from several months to a year to complete.

Things to Talk Over With Relevant Agencies

Other organizations such as local ILC may be affected by actions taken by the consumer group. Heads of relevant agencies should be kept informed of the group's goals and planned actions. Communications about what actions are planned and when they will occur will avoid bad feelings and promote cooperation among related organizations.

PART II: ACTION PLAN

Chapter 3: Overview of the Action Plan

I think it is important to do something about this problem. We are the only ones who can teach the community what we need and what we want in terms of the enforcement of handicapped parking. We want to be independent and we need to change the handicapping conditions of our community.

In this chapter, an overview of the action plan is presented. The overview may help put the following short chapters into perspective. Basically, the action plan involves identifying resources for action, studying the problem in the local community, choosing settings for action, documenting the problem in those settings, taking action on inadequate spaces or parking violations, evaluating the effects of action, and taking necessary follow-up actions. The general plan, specific action steps, and tentative time line are noted below:

ACTION PLAN

	Time line -Week
A. Identify Resources for Taking Action	
1. Identify an active group of consumers with disabilities	1
2. Obtain support from a sponsoring agency.	
3. Obtain volunteers for required action.	1-2
4. Obtain support from other agencies.	2
5. Identify a contact person with the local media.	2-3
B. Study the Problem	
1. Study available surveys and reports.	3-4
2. Interview consumers.	4-5
3. Talk to store managers.	5-6
4. Talk to violators of handicapped parking spaces (optional)	5-6
5. Talk to police about the problem.	6-7
6. Obtain information about handicapped ordinance, fine, and regulations in your local community.	7
7. Obtain information about handicapped parking permits.	7
8. Obtain a rough estimate of the level of the problem.	7, 8, 9
C. Choose Settings for Action	
1. Identify specific businesses and parking sites for observation.	9
2. Identify the specific number of spaces in sites and their specific problem.	10
3. Contact store managers.	11
D. Document the Problem	
1. Learn how to collect observational data.	11
2. Collect data on violations of handicapped parking spaces.	11,12,13

3. Prepare a summary report of data on available spaces and violations. 13

E. Taking Action on Inadequate Spaces

1. Identify specific solutions and alternatives. 13
2. Discuss the consequences of alternatives and choose alternatives. 13
4. Visit with business managers about alternatives. 14
5. Prompt action by businesses. 14
6. Use the media to encourage action. 14-15

F. Taking Action on Parking Violations

1. Identify specific solution alternatives (e.g., obtaining commitment from police to provide a crackdown on violators).
2. Plan the action.
3. Collect data on violations before the action is taken.
4. Collect data during the action.

G. Evaluate the Effects of Action

1. Collect data on available spaces after the action is implemented.
2. Collect data on violations after the action is implemented.
3. Discuss the consequences of the action implemented.

H. Take Follow-Up Actions as Necessary

1. Conduct periodic reviews of the problem.
2. Take action on inadequate spaces if necessary.
3. Take action on parking violations if necessary.
4. Present the data on the effects of action to decision makers to prompt a permanent solution.

Chapter 4: Identifying Resources for Taking Action

Before too much time is spent planning for action, consider what resources might be available. Self-help efforts require the commitment of energetic people from a fairly stable organization. They may also need the approval of related organizations and cooperation from other agencies.

Things to Do

1. Identify an active group of consumers with disabilities:

- An *active group* of consumers with disabilities should be identified to conduct the project. This may be a Consumer Advisory Committee, a task force or subcommittee of such a group, a mayor's commission on disabilities, or an ad hoc group of varied citizens.
- *Select a facilitator* responsible for monitoring actions regarding handicapped parking and organizing the group.
- *Select a meeting place* and time to plan steps and action.
- Meet as necessary (once a week or every 2 weeks).
- Organize social events (parties) to *reward the group* for their efforts, after a successful action has been completed.

2. Obtain support from a sponsoring agency:

The local ILC could serve as a sponsoring agency to provide resources such as a meeting place, transportation, and materials (paper, envelopes, stamps).

3. *Obtain volunteers for required action:*

- Request volunteers to work on the project. They may come from the organization's membership, from an announcement in the consumers' newsletter, the local newspaper, or from staff of relevant agencies interested in the issue.
- Seek at least two volunteers to work together on specific tasks.
- Provide recognition for the efforts of volunteers.

4. *Obtain support from other agencies:*

- Identify other agencies from which support is needed, such as the local police department. Contact the police department, and share your concern about handicapped parking.

5. *Identify a contact person in the local media:*

- Identify someone in the local media (radio and/or newspaper) who could provide publicity for important action steps taken by the group. If applicable, identify a local media person who has published reports about citizens with disabilities and/or is interested in issues affecting them.

Illustration: A Group Identifies Resources for Taking Action

This stage is illustrated in the actions of Independence in Action, a consumer advisory committee of Independence Inc., Lawrence, Kansas. The group decided that it would take on the problem of handicapped parking at one of its regular monthly meetings. The chairperson of Independence in Action was chosen to lead this effort. She requested volunteers for the major actions of contacting the police department, local businesses, and local media. Volunteers were sought by an announcement in the consumer group's newsletter. Responsibilities were distributed among members according to their competencies and abilities.

Support was obtained from the local ILC in providing a meeting place, transportation when needed, and other material resources (e.g., paper, typewriter, stamps, and envelopes). Meetings were held once a week for a period of 5 months and later every 2 weeks for a period of 5 months, until the project was completed.

Support was also obtained from the local police department. The researchers established the first contact with the police chief by 'sharing the problem of lack of enforcement of handicapped parking spaces and introducing the group's approach to solving the problem.

To reward members for their efforts, the group decided to have one of their meetings in a local restaurant to celebrate early successful actions in obtaining upright signs. At the end of the project, the consumer group decided to celebrate the success of the police crackdown with a potluck dinner party.

Chapter 5: Study the Problem

During several public discussions held with disabled consumers, the main dimensions of the problem of handicapped parking were identified: a) lack of enforcement of handicapped parking by police personnel, b) lack of handicapped parking spaces, c) lack of adequate handicapped parking signs, and d) lack of consultation with knowledgeable professionals about designing handicapped parking spaces and signs.

These problems created several negative consequences for disabled residents. If a disabled person does not find a nearby parking space, he or she may have to walk a longer distance, thereby risking being hit by a car or falling down while crossing the parking lot. Surrounding sidewalks may also make it difficult for him/her to get around with walkers or wheelchairs. By reserving spaces for handicapped parking use only, businesses are more accessible to people who need them.

Things to Do:

1. *Study available surveys and reports:*

- To identify the dimensions of the handicapped parking problem, use the results of a local Concerns Report Method if available. Review the Brief Report data on the issue of handicapped parking, and review the summary of the public discussion on the issue.

2. *Interview consumers with disabilities:*

- Ask consumers which private or public businesses they frequent the most, during which days, and at what times. In addition, ask consumers which local handicapped parking sites seem to be the most frequently violated.
- Have consumers and interested advocates complete the handicapped parking survey (see Table 1, next page) to help identify the dimensions of the handicapped parking problem.
- Ask consumers what kind of problems they have to face when parking.
- Ask consumers for good examples of handicapped parking spaces in town because of their accessibility, adequate signs, and proper use.

3. *Talk to store managers:*

- Contact store managers. Introduce the group and the problem of handicapped parking.
- Ask store managers about the frequency of use of handicapped parking spaces by disabled and nondisabled consumers.
- Ask store managers about how many customers with disabilities they serve.
- Ask store managers to identify their rush hours and busy days.
- Ask store managers if they would be willing to work with the group to solve the problem of handicapped parking (for example, willing to support a crackdown and/or buy parking signs if necessary).

4. *Talk to violators of handicapped parking spaces:*

- Ask people in shopping centers (especially observed violators) how often they violate handicapped parking spaces.
- Ask violators why they violated handicapped parking spaces.

5. *Talk to police about the problem:*

- Visit with the police to talk about the problem. Find out what zones are being enforced if any and how often.
- Share the data and information you have collected with the police.
- Ask the police what are the necessary conditions for enforcing handicapped parking spaces. For example, some municipal courts require that a space have an upright sign before they are willing to prosecute violators.
- Discuss the possibility of a police crackdown on violators if necessary.

6. *Obtain information about handicapped parking ordinance:*

- Visit with your local city manager, traffic inspector, and other decision makers (if necessary) to gather information about the local parking ordinance in your community and fines applicable to violators. Obtain information about building code regulations regarding parking.
- Obtain information about where to get handicapped parking signs and a cost estimate.

7. *Obtain information about handicapped parking permits:*

- Obtain information on where to get handicapped parking license and mirror tags for those residents who need them. Also, information about their cost and requirements (for

example, doctor's approval).

8. *Obtain a rough estimate of the level of the problem:*

- Observe what happens in handicapped parking spaces available in the community (who uses the space and for how long). Survey handicapped parking spaces by observing them for a period of time (e.g., stay at site for 30 or 60 minutes). Take notes describing how the handicapped parking space is used.

Illustration: A Group Studies the Problem

Lawrence, Kansas, was among the communities where handicapped parking was identified as a problem by disabled consumers. Consumers of Independence in Action identified the dimensions of the problem by interviewing disabled consumers, talking to store managers, talking to violators in parking lots, and visiting with the police department. The main dimensions of the problem were identified as the lack of upright metal signs in some spaces and the lack of enforcement in others.

Police department officials reported that there was no enforcement in private and public lots. The police also reported that enforcement of spaces without the proper sign was not possible. The municipal court judge held that an upright sign is both a necessary and sufficient condition for the police to issue a ticket for a parking violation. The group also learned that the construction codes for the city of Lawrence require public and private businesses to include accessible parking.

In addition, consumers published in the center's newsletter information about where and how to get a license tag for handicapped drivers. In addition, it was necessary to contact a local sign company in order to get information about the cost of handicapped parking signs and where and how to get them.

Finally, the group conducted actual observations of violations in sites most frequented by disabled consumers. Out of 44 spaces observed in 21 parking lots, 9 sites had only a ground sign, one extra space was needed in one site, and frequent violations were reported in all spaces. The behavioral observation of the problem showed that handicapped parking spaces were violated at an average of 30% of the time observed (1 hour).

Chapter 6: Choose Settings for Action

In this step, it is necessary to identify those settings with which the group wants to work. This decision should be based on observed levels of the problem. Settings are chosen either because they lack enforcement, lack adequate signs, lack the necessary number of spaces, or are frequently violated. Once settings are chosen and data collected, action can be implemented to solve the identified problem.

Things to Do

1. *Identify specific businesses and parking sites for observation:*

- Identify the private and public businesses your group chooses to work with (e.g., the parking sites of specific grocery stores, medical plazas, and restaurants). Use the handicapped parking consumer survey explained in Chapter 5 to select possible sites.

2. *Identify the number of spaces in the site and their specific problem:*

- After conducting step 1, the group should have a better idea of how to identify which local sites need action.
- Identify spaces by the type of business they conduct (for example, restaurants, grocery stores), and define what is the problem with each site (for example, lack of upright metal sign, spaces too far from entrances, high levels of violation despite presence of sign).

3. *Contact store managers:*

- Identify the names, telephone numbers and addresses of store or business managers, and

express the group's desire to work with them toward a solution to the problem.

Illustration: A Group Chooses Settings for Action

In this step, private businesses and public organizations that might serve as potential action sites are identified. Consumers of Independence in Action contacted grocery store managers whose stores lacked handicapped parking spaces and/or had inadequate handicapped parking signs. The contact was done by phone and mail. The main sites chosen were supermarkets, pharmacies, and discount shopping centers where spaces had only, ground signs, there was a high frequency of violations, or additional spaces for handicapped parking were needed.

Two goals were set by the consumer group: first, to prompt managers to install upright signs at several stores; second, to negotiate a crackdown on violators with the police department. It was agreed that successful attainment of these goals required further documentation of the problem.

Chapter 7: Document the Problem

It is important to collect objective data on the level of the handicapped parking problem. Such data can be used to help persuade store managers to create new parking spaces or add upright handicapped parking signs. Data on the frequency of violations also can be used to convince police of the importance of a crackdown on violators. Finally, data may be used to evaluate the effects of actions taken on the handicapped parking problem.

An observational battery and training materials were created for use by consumer groups (see Appendix 1). They provide instructions on how to observe and record the percentage of appropriate and inappropriate use of handicapped parking spaces. The materials include objective definitions of terms, such as appropriate and inappropriate occupancy of handicapped parking spaces. The definitions have been tested for accuracy and reliability.

Things to Do

1. Learn how to collect observational data:

- Appendix 1 contains a self-training manual for observing violators of handicapped parking spaces. It will teach you how to collect data on the percentage of appropriate and inappropriate use of handicapped parking spaces. It takes no more than a few hours to learn how to collect data.

2. Collect data on violations of handicapped parking spaces:

- After studying Appendix 1, collect data at least three times a week for at least 2 weeks. Data should be collected in sites where some action will be taken. Data from several sites on different days over a 2-week period should provide reasonable documentation of the problem.

3. Prepare a summary report of data on available spaces and violations:

- Appendix 1 contains a section on how to calculate the percentage of violations per space. Calculate the percentage of time spaces are being violated and the frequency of cars violating the spaces so you can report the level of the problem to store managers and the police department.

Illustration: A Group Documents the Problem

Using the observational battery, two disabled residents and five university students were trained to observe and record occupancy of handicapped parking spaces. Training materials described in Appendix 1 were used.

Two different studies were conducted sequentially. The first study examined the effects of upright signs; the second, the effects of a police crackdown on violators. For Study 1, data were

taken in two different stores that had only ground signs (Rusty's IGA Supermarket and Gibson's Discount Center). These two sites each had two spaces reserved for handicapped parking use. Data were collected on the number of cars violating the spaces and the amount of time (percent intervals) of violations within an hour. Observational data were helpful in convincing store owners of the level of the problem and the need for upright metal signs.

For Study 2, data were taken in two different sites in Lawrence (KS) and one in Topeka (KS). Although these spaces had appropriate upright metal signs, they were identified by consumers and by preliminary observations as being violated frequently. Data collected for this study were helpful in convincing the police department of the need for enforcement.

Chapter 8: Taking Action on Inadequate Spaces

To solve the handicapped parking problems identified by the group, action steps need to be planned and negotiated with store managers and the police department, as appropriate. The group should explore all possible alternatives to remediate identified problems. They should be discussed with consumers, interested agencies, and businesses.

Things to Do

1. *Identify specific solutions and alternatives:*

- Identify what needs to be done to solve the problem of inadequate spaces (e.g., one handicapped parking space is needed, signs need to be changed, spaces need to be wider, upright signs need to be installed). According to the dimensions of the problem you have identified, specify the action needed in each specific site.

Example: Handicapped parking spaces with only ground sign.

Specific examples are: Gibson's Discount Center, Food Barn, Rusty's IGA Supermarket, and the Medical Arts Pharmacy.

Action needed: Prompt managers to install upright metal signs (4-foot).

- Identify all the steps needed to accomplish the action, and set a time line for acting on identified steps.

2. *Discuss the consequences of acting on identified alternatives:*

- Study the positive and negative consequences of acting on each identified step.
- Choose the best alternatives.
- Distribute responsibilities among group members according to their abilities.

3. *Call or visit with business managers:*

- Describe the problem to business managers.
- Share the data collected to document the problem.
- Describe possible solutions.
- Describe positive consequences if action is taken.
- Advocate for the action; attempt to persuade.
- Offer assistance in implementing the action.
- Provide necessary information to managers about how to remediate the problem. For example, if the problem is lack of signs, provide information on where to get the signs, who to contact for the signs, and how much they are. If the problem is inadequate space length and/or ramp, provide adequate information based on accepted architectural plans.
- Thank managers for their help or assistance. Do this personally or by mail.

4. *Prompt action by business:*

- Send letters or use personal contact to remind business managers of agreed-upon actions; do this until the desired action is taken.

5. *Use the media to prompt action:*

- If personal persuasion is not effective initially, contact the media describing the problem and what alternatives are requested by the group. The group might send a letter to the editor, request an interview with the media, or arrange a press conference to discuss this issue and preferred alternatives.

Illustration: A Group Takes Action on Inadequate Spaces

Members of Independence in Action discussed at their meetings possible solutions to remediate the problem of lack of upright handicapped parking signs in several spaces. Members visited with store managers to share the data collected and advocate for upright metal signs and an additional space in one site. In addition, group members provided store managers with information on where to get the handicapped parking signs and information on characteristics of an adequate sign and an accessible handicapped parking space. See Appendix 2 for a description of architectural specifications of handicapped parking spaces from the Federal Register.

Weekly prompts (telephone calls and letters) were sent to store managers until the agreed-upon action was taken. Furthermore, consumers sent letters to the editor of the local newspaper to request improvements. The letters were never published, however.

Chapter 9: Taking Action on Parking Violations

The lack of enforcement of handicapped parking spaces seems to be a major concern of people with physical disabilities. One promising action to solve this problem is a police crackdown--periodic, short-term, intensive ticketing for violators of handicapped parking spaces. If the risk of receiving a ticket is increased, people will be less likely to violate citizens with disabilities' right to park in spaces accessible to businesses.

Things to Do

1. *Identify specific solution alternatives:*

- Specify what needs to be done to solve the problem of lack of enforcement of handicapped parking. Seek a commitment from police officials to crack down on violators for a specified period of time. For example, officers might be expected to monitor parking spaces along their regular patrol and issue tickets for every violation observed during a 1-week crackdown. In addition, the group might obtain a commitment from business managers to call the police every time anybody reports a violator.

2. *Plan the action:*

- Plan with your group when the action should be taken and for how long it is likely to be needed.
- Plan with the agency (e.g., police) when the action should be taken and for how long.
- Make sure that the crackdown will go in effect during the times, days, and sites of maximum violations.

3. *Collect data on violations before action is taken:*

- Collecting data before the action is implemented will allow you to see whether the intervention had any effect. Use the observational battery described in Appendix 1 to collect data to document the problem before the action is taken.

4. *Collect data during the action:*

- Data should be collected when the action is being implemented, for example, during the week of a crackdown. If possible, observations should be on the same schedule as before the action started. Comparing violations before a crackdown and during the crackdown may help determine how long an action needs to occur to be effective. These data could be shared with group members, the police department, and interested groups.

Illustration: A Group Takes Action on Parking Violations

Lack of enforcement of handicapped parking ordinances was identified as the main problem in one local community. A police crackdown was identified as the intervention needed.

The researchers and consumers contacted the police chief, shared data on the observed number of violations, and advocated for a crackdown. The crackdown was conducted for 1 week at all sites in the city. An average of six police patrol officers oversaw handicapped parking spaces an average of every 2 hours for 12 hours each day. Observations of violations were taken four different times during the week of the crackdown.

Chapter 10: Evaluate the Effects of Action

Collecting data will allow a comparison of the level of the problem before, during, and after an action is taken. Observe the problem after action has been taken to see whether the action was effective or not. Use the same observational battery and the same periods of time, days, and hours as used earlier.

Things to Do

1. *Collect data on adequate spaces after action is implemented:*

- Collect data on the effects of the action in each particular space where action was taken. For businesses that were informed of the need to install upright metal signs, observe the number of spaces in which signs were installed and how that affected the percentage of violations. For other actions, such as repainting the ground signs or installing a new space, report actions to the group, and express appreciation to the business.

2. *Collect data on violations after the action is implemented:*

- For a police crackdown, collect data on the percentage of appropriate and inappropriate use of handicapped parking spaces, and the frequency of cars violating spaces.

3. *Discuss the consequences of the action implemented:*

- Discuss the consequences of the action taken with all agencies who participated in the change effort. Discuss with store managers how their customers were affected by adding a new space. Discuss with the police the effects of frequent ticketing on compliance with handicapped parking laws. Discuss the positive and negative (if any) consequences of actions taken. This information may help establish support for similar actions in the future.

Illustration: A Group Evaluates the Effects of Actions

Data were collected before and after upright signs were installed at two different stores. The signs were installed at different times after a couple of months of prompting managers. Installing upright signs produced immediate reductions in inappropriate uses of the spaces and reduced the number of cars violating spaces. Also, the data suggest that 4-foot signs may be more effective in reducing violations than 8-foot signs. It appears that the taller sign is out of the driver's immediate view.

Data were also collected to evaluate the effects of a crackdown on the percentage of

inappropriate use of handicapped parking spaces. Results suggest that the crackdown was effective in reducing the average percentage of violations. Sixty tickets were issued during the 1-week crackdown period.

Evaluation results were presented to the police along with a compliment for their help. In addition, several individuals wrote to the police department to express their thanks. No reports of unexpected negative consequences — either to the participants, police, private businesses, or the disabled population — were brought to the attention of the authors. These actions appeared to be successful in solving the problem of handicapped parking experienced by disabled residents in this community.

Chapter 11: Taking Follow-Up Actions as Necessary

Follow up on actions to look for visible changes in sites that the group has been working on. This follow-up also helps determine the long-term effects of actions taken.

1. *Conduct periodic reviews of the problem:*

- Collect data 1 month, 6 months, and 1 year later to see the long-term effects of your actions. Use the same observational battery as described in Appendix 1.

2. *Take action on inadequate spaces, if necessary:*

- Take periodic observations of the spaces initially observed by the group. If desired actions are not taken by business managers, call or visit them again to review difficulties in implementing the actions, discuss consequences for implementing indicated actions, and identify other alternatives, if necessary.
- Plan any further action the group wants to take for particular locations, such as prompting managers or using the media to prompt action.
- If action has been taken by the community (e.g., a store added a handicapped parking space or posted an upright sign), send a thank you note or a letter to the editor providing positive feedback and appreciation for the action taken.

3. *Take action on parking violations, if necessary:*

- If violations persist months later, negotiate periodic police crackdowns on handicapped parking violations. The results may suggest the need for one or two crackdowns per year.

4. *Present the data on the effects of action to decision makers:*

- Share the results of the action taken to decision makers in your community. Meet with the police department chief, the local building inspector, city mayor, and prompt a change in policy and/or a permanent solution to the problem.

•

Illustration: A Group Takes Follow Up Actions

Follow-up data were collected 1 month after signs were installed to examine the effects of the upright metal sign over time. Results suggested that, in the absence of enforcement, violations tended to increase over time, and the positive effects are of rather short duration. Thank you letters were sent to store managers providing positive feedback for their efforts to install new signs.

Several follow-up measures were also collected to measure the effects of the police crackdown over time. These data suggest that the crackdown was effective in reducing the percentage of time the space was violated and the number of cars violating spaces. Currently, members of Independence in Action are negotiating with the police department to push for a periodic crackdown and for the enforcement of buildings codes regarding accessible parking regulations (see Appendix 3).

Appendix 1: Self-Training Manual for Observing Violators of Handicapped Parking Spaces

RATIONALE

A community's lack of respect for handicapped parking and the lack of enforcement of handicapped parking spaces are problems that affect persons with disabilities. A space reserved for handicapped use only provides accessibility to a person who needs it. If an individual with a disability does not find a parking space close to a store, she/he may have to: (a) walk a longer distance to get to the store, (b) risk being hit by a car, (c) risk falling down while crossing the parking lot, especially in bad weather, (d) face lack of space to get around with assistive devices such as walkers and wheelchairs.

To obtain accurate data on the dimension of the problem, be a good observer. This manual will teach you how to observe handicapped parking spaces and report whether they are being used appropriately or inappropriately.

What do I need to know?

To be a good observer of handicapped parking spaces, you need to: Follow the instruction provided in this manual, and learn the following definitions:

- What is a handicapped parking space?
- What is an occupied handicapped parking space?
- When is a handicapped parking space used appropriately?
- When is a handicapped parking used inappropriately?
- What are obstacles in a handicapped parking space?

Once you know these definitions, you are ready to learn how to record your observations. Please follow the instructions on how to record your observations, read the example provided in this manual, and then start observing violations in handicapped parking spaces.

SECTION I: HANDICAPPED PARKING DEFINITIONS

What is a handicapped parking space?

A handicapped parking space is a space reserved for use by handicapped persons or persons responsible for transporting handicapped persons on public or private property. A space is determined for this use when a yellow handicapped sign (wheelchair symbol) is on the ground and/or a posted upright sign (blue sign with a white wheelchair symbol) is centered in front of the space.

- *Is this definition clear?
 - *Do you have any questions?
- Please move to the next definition.

What is an occupied handicapped parking space?

A handicapped parking space is occupied when a vehicle is in the space while the vehicle is stopped. A stopped vehicle is one that is not moving for at least 5 seconds, whether or not the engine is running. The space is, occupied if a portion of a vehicle of at least 24" (inches) wide, 24" (inches) long, and 1" (inch) high is in the space.

- *Is this definition clear?
 - *Do you have questions?
- Please move to the next definition.

When is a handicapped parking space used appropriately?

A handicapped parking space is used appropriately when a vehicle with a handicapped license plate (wheelchair symbol) or a license plate with the words "Disabled Veteran" or a window tag (blue tag with the white wheelchair) is parked on that space (see below for examples).

*Is this definition clear?

*Do you have questions?

Please move to the next definition.

Examples: license plate window tag

When is a handicapped parking space violated?

A handicapped parking space is violated or used inappropriately when a vehicle that does not have a handicapped license plate or a handicapped window tag is parked in that space.

*Is this definition clear?

*Do you have questions?

Please move to the next definition.

What are obstacles in a handicapped parking space?

Obstacles in a handicapped parking space are objects that occupy a portion of the space. The object must be at least 24" (inches) wide, 24" (inches) long and 1" (inch) high. Examples of obstacles include shopping bags, shopping carts, snow, tools, etc. (People and animals are not considered obstacles.)

*Is this definition clear?

*Do you have questions?

Please move to the next section.

SECTION II: RECORDING YOUR OBSERVATIONS

Once you know the definitions of the behavior you are going to observe, you need to know how to record your observations. To record your observations, you need to have the following material.

Material

- Stopwatch
- Recording formats
- Pen or pencil with eraser
- Notebook
- Map of the site
- Camera to take pictures and/or slides when possible

HOW TO RECORD

How to Do It

There are many ways to record behavior being observed. In this case, what you are observing is whether the handicapped parking space is being used **appropriately** or **inappropriately**. A behavior is basically observed for the same period of time every day during the duration of the study. For this particular case, the following observation period will be used:

Observation technique: The observer will be at the site for 1 hour, and after every 1-minute

interval, the observer will look at the spaces and check in the proper box (X) whether the space is occupied appropriately, inappropriately, whether the space is empty, or if it has obstacles in it. Do not record anything during the minute, only at the end of each minute. If you stay at the site for 1 hour, at the end of the hour, you will have 60 minutes recorded. Indicate when a new car is violating the space by writing in the first minute the letter (n) along with the check (J). By following these instructions at the end of the session, you will know how many cars violated the space in 1 hour and for how many minutes (in 1 hour) the space was occupied by a violator.

Using the Recording Format

The recording format is a sheet where you will check your observations. The information you have to fill out in the format is the following:

Site: Write the name of the place where you are, e.g., Rusty's on Iowa, Dillon's on 6th St., Gibson's, the public library, etc.

Date: Write the current date, for instance, October 20, 1983.

Recorder: Write your name.

Time starting: Write the time when you arrive at the site and start observing.

Time ending: Once you have finished your observations, write the ending time.

Space #: Write the number of the space you are observing (see map). If there is more than one space in a site, you need to number the spaces. Now you are ready to start observing. Once the first minute has passed, look at the space, and check whether the space is:

Appro. = Appropriate parking

Inappro. = Inappropriate parking (violation)

Empty = Empty space

Obst. = Obstacles in the space.

Check the proper box (), and do the same for every space after each 1-minute interval.

Using the Recording Book

Use your notebook to describe events you observe in the site that are related to use of the handicapped parking space. Examples would be: Briefly describe weather conditions (raining, snowing); describe light conditions (whether is dark or not).

Record in your format or notebook whether or not you see a car without a handicapped parking tag parked in the space but with a disabled person in it. Please check the number of minutes he or she is parked.

SECTION III: EXAMPLE

Suppose you are going to observe and record what happens in the handicapped parking spaces of a popular supermarket.

1. Go the site.
2. Bring your materials.
3. Identify where the handicapped parking spaces are. For this particular example, the handicapped parking spaces are from north to south in the last two rows of the parking lot in front of the store. There are four parking spaces, all with ground-yellow signs only. (See the map for location of the spaces).
4. Find a space where you can park or stay safely, from which you can observe all four spaces or from which you can get in and out or your car safely to observe spaces. You can either park close to any of these spaces or stay in front of the store.
5. Set your watch, and wait for 1 minute to pass.
6. Once you start a new minute, look to space number 1, check in the proper box whether the space is occupied appropriately, inappropriately, empty, or if obstacles are in the space (see map). Do the

- same for space number 2, 3, and 4. After each minute, all four different spaces are being observed.
7. Every minute during an hour you will be recording as in step 6.
 8. If you have any doubts about what is happening in the space, consult your definitions.
 9. If you do not see clearly whether a vehicle is violating the space or not, move closer to the car, and take a look at it.
 10. Use your notebook to write any additional comments or anecdotes you want to report. For example: comments about the day (raining, snow, light) and comments about the violators you see.
 11. Fill out the recording format completely. Include name, time ending, mileage from the point you started (i.e., your house), date, site, and space number.

SECTION IV: HOW TO CALCULATE PERCENTAGES AND RELIABILITY

Once you have done your observations and have your recording formats completed, you need to know how to calculate your percentage. You need to report the percentage of appropriate and inappropriate use of handicapped parking spaces during your observation period. To calculate your observations, you need the following material:

MATERIAL

- Completed handicapped parking recording formats
- Calculator
- Pen
- Notebook

(This job can be done by one or two individuals).

How to Calculate Percentage

Four possible options are presented in the recording format. They are: Appropriate - Inappropriate - Empty space - Obstacles. Count how many minutes (or intervals) you checked for each of those possibilities for each space and site separately.

For example:

Site 1, Space 1

Appropriate: 20 min.

Inappropriate: 35 min.

Empty space: 5 min.

Obstacles: 0 min.

Now, divide 20 by 60 (which is the total number of observations) times 100%, and you will get 33%. Do the same for each option. The percentage means that for 33% of the intervals or time of observation the space was being used appropriately.

To report the number of cars violating the space during the hour, count its frequency per session. To summarize, for every option in your recording format, you count the total number of minutes that option was checked, divide that number by the total number of minutes you were observing, and multiply that amount by 100. Follow the same procedure for each space and for each individual site.

How to Calculate the Reliability of Your Observation

When conducting observations on the use of handicapped parking spaces, you may need to know whether the observations are accurate. Two independent observers' agreement on their observations is called reliability.

MATERIAL

- Two equal recording formats
- Two pencils
- Two stopwatches

- Two notebooks
- Two site maps

How to Take Reliability Measures

To take reliability measures, you need two (2) observers in the same site, at the same time, observing the percentage of violations on the same spaces but recording independently (from two different cars or standing in two different spots). Once this observation period is over, the recording formats will be compared to calculate the percentage of reliability or agreement.

Calculating Reliability

To calculate reliability, you need to count the number of agreements between the two recording formats of the two independent observers and divide by the number of agreements plus the number of disagreements. (Reliability measures need to be taken at least one time before an intervention is in action, at least one time during the intervention, and at least one time after the intervention took place.)

Appendix 2: Designing Handicapped Parking Spaces: Important Characteristics to Consider

Accessible Parking

1. Space length: Bigger than normal spaces to allow wheelchairs to move. (See appropriate length and width next page.)
2. Distances from ramp: A handicapped parking space should not be right on the ramp nor in front of the ramp. The ramp should be no more than 10 feet from the space, either to the right or left of the space, depending on where the entrance to the store is.
3. Distance from the store main door: The space should be no more than 15 feet from the store's main door.
4. The distance from the space to the ramp and from the ramp to the store door should be free of obstacles and barriers.

Optimal characteristics of a handicapped parking space sign

1. The sign should be in front of the space.
2. The sign should be posted (upright sign) but not hanging from the building structure. It should be on a separate post.
3. The sign should be at the driver's eye level (between 4 and 5 feet high).
4. The sign should have the handicapped symbol on it and words indicating: "Handicapped parking" or "Reserved for handicapped parking."
5. The space should be in front of the store, in the closest parking line, to avoid crossing lines or walking.
6. It is optimal to have a light bulb underneath the sign so it can be seen in the dark.
7. If the sign is in the middle of two handicapped parking spaces, it should include an arrow pointing to both spaces.

(See Federal Register, Rules and Regulations).

Appendix 3: Policy Research Report/Research and Policy Recommendations Regarding Handicapped Parking Violators in Lawrence, Kansas

The issue of handicapped parking has been identified as one of the major problems facing the disabled community in Lawrence. Some of the specific dimensions identified by residents with disabilities include the lack of appropriate upright metal signs — a necessary condition for enforcement — and frequent violations of marked spaces. To address these problems, a group of disabled consumers from Independence in Action, a consumer advisory committee for Independence Inc., took several actions. These included negotiating installation of upright signs by some businesses and negotiating a police crackdown on parking violations. Before April 1994, upright signs were not available in many troublesome spots, and police enforcement was practically nonexistent.

With the excellent cooperation of Ron Olin, Assistant Chief of Police, the police department conducted a 1-week, citywide crackdown on handicapped parking violations in Lawrence. The crackdown was in effect from April 12-18. Approximately six regular police patrol officers enforced handicapped parking spaces on an average of every 2 hours for 112 hours each day. Tickets were issued to those vehicles parked in spaces reserved for people with physical disabilities that did not display the appropriate car license or the appropriate window tag. In the months following the crackdown, patrol officers have maintained enforcement at a reduced level. Observational data were recorded on the percentage of intervals of inappropriate use of handicapped parking spaces and the number of cars parked illegally. Data were taken in two sample sites with known violations (Super X, and Dillon's on Sixth Street, each site with two different spaces). Data were collected for 1 week before the crackdown, during the crackdown, and after the crackdown. In addition, five follow-up measures were obtained in the approximately 6 months following the crackdown.

The results indicate that the crackdown was effective in reducing the percentage of violations from an average of 25% before the crackdown, 9% after the crackdown, and 2% during follow-up. Data also indicate that the police crackdown was effective in reducing the number of cars inappropriately parked (see Figure 1). The effects occurred immediately following the crackdown in both sites in Lawrence. No change was observed in a control site (Topeka) in which no crackdown occurred, suggesting that the crackdown and follow-up enforcement--and not something else--was responsible for the change.

A survey was sent to the business community, the police department, the board of directors of Independence Inc., and some residents with disabilities, addressing the importance of the problem, willingness to support a crackdown, and satisfaction with the crackdown. Overall, respondents thought that handicapped parking violations were an important problem (92% importance rating) and that they were willing to support another crackdown (87% support). This included an 88% support rating from police officers. Also, respondents indicated they were satisfied with the results of the police crackdown (68% satisfaction rating).

Two policy recommendations are offered to reduce inappropriate use of handicapped parking spaces:

- First, create a policy to upgrade current spaces to include an upright sign for all handicapped spaces. This is important, because a ground sign has been ruled insufficient by the municipal court judge, and police will not enforce violations in spaces with ground signs only. A recent building code change requires that a handicapped space be provided for a site plan involving 10 or more spaces and that the space meets ANSI standards, including an upright sign at eye level and adequate width to permit off loading of a wheelchair.
- Second, pass a resolution supporting periodic crackdowns, perhaps once a year, and regular enforcement of violations. Such a resolution, coupled with an increase in the maximum fine for violations, would enhance public awareness of the city's commitment to enforcement. Positive action on these recommendations would extend the city's commitment to making Lawrence accessible to all its citizens.

Report prepared by Yolanda Suarez de Balcazar, Stephen B. Fawcett (Research and Training Center for Independent Living and Center for Public Affairs), and Barbara Lumley (Independence in Action).