

# AMERICANS WITH DISABILITIES ACT FIELD SURVEY

Prepared for  
**City of Albuquerque**  
**Public Works Department**

Prepared by  
**JHK & Associates**

January 1996

**BENISON**

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**Americans with Disabilities Act  
Field Survey**

**Prepared for:  
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Project #60066

# TABLE OF CONTENTS

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<i>Description</i>	<i>Page</i>
<b>1</b> <b>Executive Summary</b> .....	1
Introduction .....	1
Summary Results of the Survey .....	1
Recommendations.....	4
<b>2</b> <b>The Field Survey</b> .....	6
Background .....	6
Project Scope .....	7
Public Involvement .....	7
The Sample Survey.....	8
Types of ADA Non-compliance Issues .....	8
Sample Selection .....	12
High Use Area Sample .....	12
Citywide Sample .....	12
Survey Reliability .....	13
Survey Methodology.....	13
Data Expansion and Analysis Procedures .....	13
<b>3</b> <b>Survey Results</b> .....	15
Survey Summary .....	15
Street Light Poles .....	18
Ownership .....	18
<b>4</b> <b>Mitigation Measures, Cost Estimates, and Funding</b> .....	19
Mitigation Measures and Cost Estimates .....	19
Funding.....	22
Funding Approach.....	22
Review of Existing City Standards and Specifications .....	23

APPENDIX A - Roadway Sample Universe

APPENDIX B - Summary of Sample Data by Type of Non-compliance for Major Roadways

APPENDIX C - Summary of Mitigation Measures and Cost Estimates to Correct Deficiencies on Major Roadways

APPENDIX D - Modifications to City of Albuquerque Standard Specifications for Public Works Construction

## TABLE OF CONTENTS (Continued)

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### LIST OF TABLES

---

<i>Description</i>	<i>Page</i>
Table 1 Roadways Sampled by Type.....	2
Table 2 Citywide Summary of Selected Non-compliance Occurrences for Major Streets.....	3
Table 3 Mitigation Measures and Unit Costs .....	19

### LIST OF EXHIBITS

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Exhibit 1 Examples of Conflicts .....	9
Exhibit 2 Potential Conflicts .....	11
Exhibit 3 Selected Non-compliance summaries for Major Streets .....	17
Exhibit 4 Selected Cost Summaries for Mitigation Measures on Major Streets .....	21

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# 1. EXECUTIVE SUMMARY

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## **INTRODUCTION**

The Americans with Disabilities Act of 1990, Public Law 101-336, among other requirements, prohibits discrimination on the basis of disability in state and local government services. The law extends the prohibition of discrimination in federally assisted programs established by section 504 of the Rehabilitation Act of 1973 to all activities of state and local governments, including those that do not receive federal financial assistance. It requires public entities to make any necessary structural changes in facilities as soon as possible to meet the requirements of the law, but in no event later than three years after the effective date of the regulation (i.e. no later than January 26, 1995). Pursuant to this law, the City of Albuquerque is interested in obtaining a better understanding of the magnitude of bringing existing facilities into compliance with the Americans with Disabilities Act and identifying the approximate cost to the City in meeting these requirements. The purpose of this study is to provide the City elected officials and staff with an overview of ADA issues as they affect the City of Albuquerque. In particular, the objective of the study is to identify the general types and concentrations of noncompliance, right-of-way considerations, and cost of bringing the City into compliance with Public Law 101-336.

In June 1995 the City of Albuquerque contracted with JHK & Associates to undertake the *Americans with Disabilities Act (ADA) Field Survey Project*. As authorized by the City Council, the purpose of the *ADA Field Survey Project* was to perform a limited field survey to determine the extent to which the City roadways and sidewalks are in compliance with the ADA. Because a complete survey of all City roadways was not possible within the time constraints and budget programmed by the City, it was determined by the City that a survey of a sample population of municipal streets could be used to achieve a general understanding of local ADA compliance issues and needs. It was also determined that because of the higher use by the disabled community, the focus of the survey would be primarily on arterial streets with secondary concentration on collector streets. This report provides the results of that survey and provides some recommendations for further actions.

## **SUMMARY RESULTS OF THE SURVEY**

This section provides a summary of the survey conducted during the summer of 1995. It describes the sampling plan, identifies the more prevalent problems, and provides an overview of the cost estimates.



The sampling plan on which the data was collected is discussed in more detail in Chapter 2. It focused on major streets (arterials and collectors) within City Council Districts (to assure that each District was adequately represented) and High Use Areas (areas which would have more intense use by the disabled). The table below shows the summary sampling statistics on a city-wide basis for the roadways by type of roadway. A detailed listing of each of the roadway segments sampled by City Council District is included as Appendix A.

**TABLE 1**  
**ROADWAYS SAMPLED BY TYPE**

<u>Roadway Classification</u>	<u>Total Miles Within City</u>	<u>Miles Sampled</u>	<u>Sample Rate</u>
Principal Arterial	142.0	47.55	33.5 %
Minor Arterial	98.6	25.28	25.6 %
Collector	109.1	9.80	9.0 %
Residential	1,352.7	7.66	0.6 %
<b>Total</b>	<b>1,702.4</b>	<b>90.28</b>	<b>5.3 %</b>

As was determined initially and shown above, the sample survey focused on the major street system with only limited residential street sampling. This resulted in good statistical sampling rates for the major streets but an inadequate sampling rate for residential streets. Because of the wide variance in residential street construction and the many miles of residential streets throughout the City, obtaining a sufficiently large enough sample of residential streets was beyond the resources available to this project. Consequently, *data shown in this report are for collector and arterial streets only throughout the City.*

As an initial step in the study, the types of potential conflicts on City streets were identified. Examples of potential conflicts are illustrated as Exhibit 1 in Chapter 2. A detailed listing of the conflicts is shown as Exhibit 2 in Chapter 2.

In terms of violations on a citywide basis, it is estimated that there are about 25,750 incidents of non-compliance within the City related to major streets (arterials and collectors). By far the most prevalent problems are where sidewalks cross driveways and where existing curb ramps are not in compliance or they are missing entirely (Curb or wheelchair ramps are where the curb has been depressed in order to allow traversal by a wheelchair, and while generally located at an intersection, they can occur anywhere within a block at places such as alleys or commercial driveways with curbs). Generally the problem with the driveways is that the slope of the driveway is too steep where it crosses the sidewalk. A steep slope could result in a wheel chair tipping over sideways. In the case of curb ramps, there are many instances where there are no curb ramps, as well as instances where existing curb ramps do not meet standards because they are too steep or direct a disabled person out into the street rather than safely and smoothly into the crosswalk. There are an estimated 12,601 driveways and 8,902 curb ramps that do not meet the ADA standards. Of the approximate 8,900 curb ramp violations, about

4,000 violations are due to missing ramps with the majority of the remaining violations due to steep ramp slopes. A Citywide summary of the individual violations by roadway type is in Appendix B.

While the problems identified above are the most prevalent, it may be useful to look at what may be considered more serious problems for the disabled community such as missing sidewalks or obstructions to sidewalks, and missing curb ramps or obstructions to curb ramps. The data show that there are an estimated 1,588 instances where there is no sidewalk or a sidewalk is obstructed. In addition, there are an estimated 4,191 instances where there is no curb ramp or the existing curb ramp is obstructed. Table 2 shows a summary of these data for the City as a whole.

**TABLE 2**  
**CITYWIDE SUMMARY OF SELECTED NON-COMPLIANCE OCCURRENCES**  
**FOR MAJOR STREETS**

<u>Driveways</u>	<u>Curb Ramps</u>	<u>No Sidewalks Or Sidewalk Obstructions</u>	<u>No Curb Ramp Or Ramp Obstructions*</u>
12,601	8,902	1,588	4,191

\* Instances where curb ramps are missing or obstructed are included in the overall "Curb Ramp" category.

In order to develop cost estimates for bringing the City into compliance, it was necessary to determine what the mitigation measure would be for each violation. This is described in more detail in Chapter 3. Generally the mitigation measures were to modify the existing sidewalk or driveway by adding additional width, reconstructing the drive pad, or constructing a curb ramp that meets standards. It was also assumed that a standard average unit cost could be applied for each potential mitigation. Costs were derived through the City's unit cost estimates increased by 30% to account for inflation and recent experience.

The cost estimates developed at this stage are extremely low since they do not include right-of-way costs or legal fees associated with property acquisition where necessary, engineering and design fees, or contingencies. To account for this, the costs developed using the units costs were increased by 30% to cover contingencies, design fees, etc. As discussed in more detail in Chapter 4, it was not feasible with the limited resources available for the survey to determine detailed right-of-way costs. However, for the overall costs, a \$250 cost per non-compliance incident was included to at least account for the minimum cost to acquire an easement. With these assumptions, the estimated cost for correcting non-compliance with the ADA for the major streets of the City is approximately \$63.6 million. This cost estimate should be considered as a minimum because of the generalized assumptions that had to be made in arriving at the estimate. While the above cost reflects the total cost for the major streets within the City as a whole, it is apparent that the total cost will be considerably higher if residential streets are included. For example, it was noted earlier that the majority of driveways throughout the City were estimated to be in non-compliance. There are approximately 1,350 miles of residential streets in the

City. If the sample data for major streets were used to estimate the violations on residential streets, it would result in an estimate 48,600 driveways on residential streets that are in non-compliance. At an average of \$2,100 to replace a driveway pad, it would cost over \$100 million just to bring the driveways on residential streets into compliance. The high potential cost exemplified by the estimated \$100 million calculated above may justify the current City approach of dealing with residential areas on a case by case basis.

The responsibility for making the improvements is not clear. It is clear that some improvements would be the City's responsibility. Modifications to curb ramps, or to remedy traffic signal and fire hydrant locations in sidewalks would be the City's responsibility. Modifications to private driveways and sidewalks, or where utility poles are non-compliant now but which were originally installed to the standards at the time of installation may or may not be the property owner's or utility company's responsibility. The City's attorneys can not provide a definitive answer at this time. However, if the sidewalk is not adequately maintained or tree roots from a tree are breaking the sidewalk, then by City ordinance, the property owner must make the necessary repairs, which would have to meet the current regulations as long as it was considered reasonable to do so. Because of this lack of information, the costs can not be broken out by responsible party.

There is one additional survey result that is important to include. In conducting the survey, it was noted that virtually every incident of non-compliance had some unique characteristics. For example, almost every driveway identified as being in non-conformance had a different slope. The importance of this is that different amounts of right-of-way are needed in order to move the sidewalk back far enough to achieve the necessary cross slope, or a different design may be needed such as employing a partial rolled curb across the driveway. Because of the limited resources available to this project, the survey could not be expanded sufficiently to collect the necessary data to reliably estimate the "degree" of deviation of the non-compliance from the standard. It should also be understood that there are areas of the City in which it is not "reasonable" by any responsible definition to bring the sidewalks, etc. up to ADA standards because of topography or existing development. To what degree this is true does, however, depend on policy and a legal opinion as to how "reasonable" is to be measured.

### **RECOMMENDATIONS**

The following are recommendations for activities the City should consider:

1. The City should complete a "self-evaluation" as discussed in Section 35.105 of the ADA regulations and develop an implementation plan that includes policy decisions on such issues as what is "reasonable" and how to address areas where modifications or construction to ADA requirements are deemed to be not reasonable.
2. The legal staff of the City should make a determination as to who is responsible for corrective actions when the original construction was to then existing standards, provide guidance as to what is "unreasonable" to meet compliance, and whether the



- City can continue its policy of dealing with residential streets on a case by case basis.
3. The City should revise construction and installation specifications so that new projects will be in compliance, keeping in mind that a "one size fits all" approach is not appropriate.
  4. The City should consider a policy of acquiring easements where feasible rather than purchasing right-of-way.
  5. The City should institute "sensitivity/awareness" training so that personnel at all levels (e.g. design engineers, managers, construction workers, etc.) are aware of the ADA and its requirements and that all personnel involved in all City projects understand the "spirit of the law".
  6. The City should implement a pilot program in one or two high priority areas and make all necessary modifications in those areas. The area of Downtown bordered by the railroad tracks, Lomas Boulevard, Coal Avenue, and Eighth Street is suggested as the highest priority area followed by the UNM/TVI area.

The two priority areas for pilot projects, Downtown and the UNM/TVI area, are areas of high pedestrian use, and areas where significant services are provided to the public. The UNM/TVI area could be a joint project with those two institutions and should include the adjacent residential areas as well. Correcting the deficiencies in an area is a more reasonable approach than trying to remedy one problem type throughout the City, as has been tried in the past. It does a disabled person little good to be able to gain access to a sidewalk via a curb ramp when a utility pole or traffic controller is blocking the sidewalk. The pilot projects would also provide an opportunity to verify cost estimates and possibly identify other considerations not readily apparent. However, the first five recommendations should be completed prior to initiating the pilot projects.

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## 2. THE FIELD SURVEY

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### **BACKGROUND**

Discrimination on the basis of disability has been of concern throughout the country for many years. The Rehabilitation Act of 1973 prohibits discrimination on the basis of disability in federally assisted programs. Subsequent to the Rehabilitation Act, the Americans with Disabilities Act (ADA) was passed in 1990. The ADA extends nondiscrimination to all public activities. The Final Rule for 28 CFR Part 35 *Nondiscrimination on the Basis of Disability in State and Government Services* was published in the Federal Register, Volume 56, Number 144, July 26, 1991. This rule implements Subtitle A of Title II of the ADA. Subtitle A of Title II extends the prohibition of discrimination in federally assisted programs established by section 504 of the Rehabilitation Act of 1973 to all activities of state and local governments, including those that do not receive federal financial assistance. It also incorporates specific prohibitions of discrimination on the basis of disability from Titles I, III, and V of the ADA. The effective date of the rule and regulation was January 26, 1992.

The ADA regulations require public entities to make any necessary structural changes in facilities as soon as possible, but in no event later than three years after the effective date of the regulation (i.e. January 26, 1995). Section 35.150 under Subpart D - Program Accessibility in part states that:

*"(a) General. A public entity shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities. This paragraph does not -*

- 1) necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;*
- 2) require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or*
- 3) require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. ..."*

Section 35.151 in part states that:

*"(b) Alteration. Each facility or part of a facility altered by, on behalf of, or for the use of a public entity in a manner that affects or could affect the usability of the facility or*

*part of the facility shall, to the maximum extent feasible, be altered in such a manner that the altered portion of the facility is readily accessible to and usable by individuals with disabilities, if the alteration was commenced after January 26, 1992."*

### **PROJECT SCOPE**

In June 1995 the City of Albuquerque contracted with JHK & Associates to undertake the *Americans with Disabilities Act (ADA) Field Survey Project*. As authorized by the City Council, the purpose of the *ADA Field Survey Project* was to perform a limited field survey to determine the extent to which the City roadways and sidewalks are in compliance with the ADA. Because a complete survey of all City roadways was not possible within the time constraints and limited resources programmed by the City, it was determined by the City that an extensive survey would not be conducted. Rather, the City determined that a survey of a sample population of municipal streets could be used to achieve a general understanding of local ADA compliance issues and needs. It was also determined that because of the higher use by the disabled community, the focus of the survey would be primarily on arterial streets with secondary concentration on collector streets. Since in the past problems associated with residential streets have usually been handled on a case-by-case basis as concerns were received by the City, residential streets were given the lowest priority for sampling.

In addition to conducting the sample field survey and related analysis, a secondary objective of the project was to provide additional information that would assist the City's compliance with the ADA. This information includes:

- ownership (City, State, private, public utilities, etc.) of the facilities which are in non-compliance or causing non-compliance
- an estimate of the cost to bring the City into compliance
- modifications to existing City of Albuquerque roadside obstructions standards which may be in conflict with the ADA standards
- based on guidance from the City Attorney, a determination of the City's liability as related to the compliance with the ADA and the responsible party for making the necessary improvements, especially the relocation of utility poles, and modifications to drive pads and sidewalks.
- possible funding sources and availability for modifications to meet the ADA standards
- a prioritization of ADA non-compliance areas into high, medium, and low priorities

In addition to collecting the above information, a third objective was to estimate the cost to bring all PNM owned light poles up to standard. This was because the City was contemplating the purchase of the light poles and was attempting to identify the total cost of that purchase.

### **PUBLIC INVOLVEMENT**

Public involvement was considered to be important to the project, especially the views of the disabled community. Two public meetings were held to receive comments from the public and members

of the disabled community to assist the consultant in identifying priority areas for ADA improvements. Meetings were held on July 11, 1995 at the South Broadway Cultural Center from 1:00 to 3:00 p.m. and on July 19, 1995 at the Palo Duro Senior Center from 6:30 to 8:30 p.m. The consultant also met with the City ADA Coordinator for additional input. In addition, valuable information was provided by a member of the project team who has been a quadriplegic for seven years and therefore, acutely aware of the daily issues associated with ADA compliance.

### THE SAMPLE SURVEY

As noted previously, it was determined that a sample survey of City streets would be used as the basis for determining general compliance with the ADA. For a sample survey to be useful, three basic issues should be addressed including:

1. what data will be collected and for what purpose,
2. where the data will be collected, and
3. how the data will be collected.

Each of these issues are discussed in the following paragraphs. It is not appropriate to use the data for purposes other than for which it has been collected since the validity of the data for those other purposes is unknown.

### TYPES OF ADA NON-COMPLIANCE ISSUES

A variety of conflicts with ADA requirements occurs on City streets. Potential conflicts were identified from several sources including:

- a review of ADA requirements
- discussions with City staff and members of the disabled community
- a preliminary field review of several streets

From the above information, a list of potential ADA conflicts was compiled. The list identifies 24 specific conflict types and a miscellaneous category. The types of conflicts fall into several general categories:

- those obstructing a sidewalk either at ground level such as a light pole or fire hydrant, or not at ground level such as an overhanging tree branch;
- missing facilities such as no sidewalk or curb ramp;
- uneven surfaces such as sidewalk breakage from tree roots; and
- slopes such as a steep horizontal slope where a sidewalk crosses a driveway or steep longitudinal slope on a ramp.

The specific types of conflicts, such as light poles or sidewalks, were further divided to allow identification of specific problems occurring at a particular location such as surface problems, inadequate slope, or obstructions. This breakdown was important especially when considering the type of mitigation



**EXHIBIT 1  
EXAMPLES OF CONFLICTS**



*As shown to the left, a narrow sidewalk, utility poles in the sidewalk, and a retaining wall adjacent to the sidewalk together present problems for the disabled. On the right, steep driveway pads crossing sidewalks next to the curb create a potentially dangerous situation. This is the most common problem and exists in every part of the City including new subdivisions.*



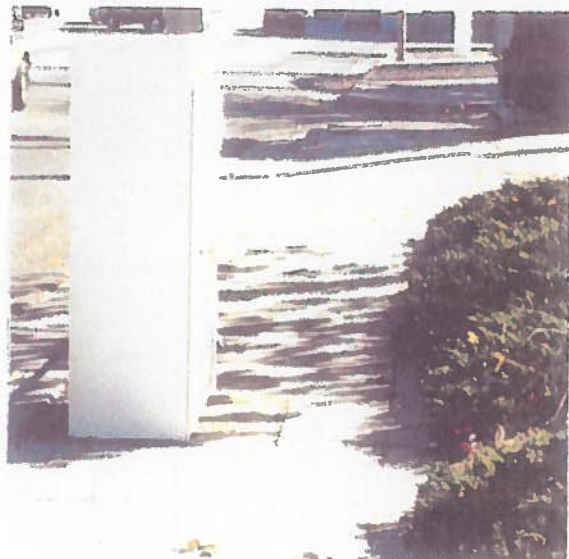
*On the left, the curb ramp which directs travel into the middle of the intersection allows access to the park, but once up the ramp there are no sidewalks, even along the roadway, to allow use of the park or continue along the roadway. On the right, a disabled person would find this bus stop difficult to use especially since the bus has to stop on the only flat, ungrassed portion of the stop in order to not block a lane on the adjacent principal arterial.*



**EXHIBIT 1 (continued)**



*On the left, a traffic controller blocks the sidewalk probably because of the proximity of the adjacent fire hydrant. With no curb ramp, getting on the sidewalk would be difficult anyway. On the right, a crosswalk leads a pedestrian to an island with no curb ramps.*



*On the left, the pole in the immediate foreground is in a handicap loading zone. The sign, which is out of the picture, on the pole as well as the blue stripe designates this as such. The rough and broken sidewalk surface makes it difficult to use. On the right, shrubbery has grown over the sidewalk which also contains a controller box resulting in a useable sidewalk width which is too narrow.*

**EXHIBIT 2  
POTENTIAL CONFLICTS**

1. **Traffic Signal Pole**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
2. **Traffic Signal Controller Cabinet**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
3. **Signalized Intersection Islands**
  - a. No curb ramp
  - b. Curb ramp not aligned with crosswalk
4. **Signalized Intersection Crosswalks**
  - a. Curb ramp not aligned with crosswalk
5. **Curb Ramp (City Street/Private Driveway)**
  - a. Surface
  - b. Slope of ramp >1:12 or flare side >1:10
  - c. Width of ramp <36"
  - d. No ramp
  - e. Slope of Adjacent road surface >1:20
  - g. Width of adjacent sidewalk <48
6. **Traffic Sign Pole (i.e. STOP sign)**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
7. **Street Light Pole (City/PNM)**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
8. **Power Poles (PNM Owned)**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
9. **Sidewalk**
  - a. Surface
  - b. Longitudinal Slope >1:20
  - c. Cross Slope >1:50
  - d. Width <36"
  - e. No sidewalk
  - f. Vertical Clearance <80"
10. **Driveway**
  - a. Surface
  - b. Cross slope of sidewalk >1:50
  - c. Slope of flared side >1:10
11. **Bus Stop**
  - a. Benches
  - c. Loading zone for wheelchair lift
12. **U.S. Mail Boxes**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
13. **Trees & Area around Trees**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
  - d. Reducing vertical clearance <80"
14. **Parking Meters**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
15. **Fire Hydrant**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
16. **Storm Drain System**
  - a. Obstructing sidewalk
  - b. Obstructing future curb ramp
  - c. Incorrect grating on the sidewalk
17. **Water System (Pipes, Meters)**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
18. **Natural Gas System (Pipes, Meters)**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
19. **Sanitary Sewer System**
20. **Cable TV Pedestal**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
21. **Telephone Pedestal/Poles**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
22. **Commercial Signs**
  - a. Obstructing sidewalk
  - b. Obstructing curb ramps
  - c. Obstructing loading zone
  - d. Reducing vertical clearance <80"
23. **Private Encroachment**
  - a. Steps to the property
  - b. Public Phone
  - c. Parking lot barriers
24. **Obstruction of Handicap Parking**
  - a. Obstructing loading zone
25. **Others**
  - a. Others

suggested to correct the problem. Examples of some conflicts in the City are shown in Exhibit 1. The listing of potential conflicts or non-compliance issues is shown as Exhibit 2.

### **SAMPLE SELECTION**

The sample selection focused on two separate objectives. One was to sample areas of high use by the disabled community within the City. A second objective was to sample the major roadways throughout the City as a whole.

#### **High Use Area Sample**

For the purposes of this study, high use areas are defined as locations having a high probability of being utilized by the general public including the disabled community. High use areas include governmental offices, regional employment centers, major activity centers (e.g. regional shopping centers, entertainment centers, and recreational centers), major educational facilities, and centralized health care facilities. Based on the available input, the areas identified as high use by the disabled community and selected for inclusion in the survey were Downtown; Old Town; UNM; Uptown; the State Fair Grounds; and Lovelace, Presbyterian, St. Joseph, and UNM Hospitals. Based on input from the public meetings, Roosevelt and Tiquex Parks, Nobhill residential area, and UNM South Campus were added.

#### **Citywide Sample**

The second sample area involved the entire City. The total mileage of public roadways in the City of Albuquerque is about 1,702, consisting of 142 miles of principal arterials, 98 miles of minor arterials, 109 miles of collector roadways, and 1,353 miles of residential streets. It was recognized that the four categories of the city roadways have different characteristics with respect to roadway features and roadside appurtenances. Therefore, it was determined that the quality of data and the subsequent statistical results would be adversely affected if the data collected did not account for data variability attributable to roadway type. Thus, the samples were randomly selected from four separate universes of roadway segments representing each of the functional classifications. In addition, to assure adequate coverage of the different areas within the City, the samples were selected by City Council District. Because accessibility of the disabled community was thought to be of greatest importance on the arterial streets, the sample was skewed to include more arterial streets with collectors receiving second priority and residential streets the lowest priority. The process used to select the sample consisted of the following steps:

- A database of the existing City arterial system was developed based on data obtained from the Middle Rio Grande Council of Governments. The database consisted of principal and minor arterials that were divided into links defined by major intersections of the arterials with other streets.
- Each of the links was assigned a computer generated random number. These links were then sorted based on their random numbers, with each number representing a segment of City arterial. Links were then selected from the sorted listing.

- Samples of collectors and residential streets were selected parallel to the arterials.

The sample generated using this process plus the streets included in the high use areas resulted in the surveying of approximately 47 miles of principal arterials, 25 miles of minor arterials, 10 miles of collectors, and 8 miles of residential streets; a total of approximately 90 miles of City streets. A listing of all roadway segments surveyed by functional classification, City Council District, and high use area is included in this report as Appendix A.

### **SURVEY RELIABILITY**

The sampling plan developed assured the reliability of the data collected for the roadway types considered to be the most important. In the city's high use areas, each roadway type was surveyed at an approximate 100% sampling rate. For the City-wide survey, the coverage encompassed 33.5% of all principal arterials, 25.6% of all minor arterials, 9.0% of all collector roadways, and 0.6% of all residential streets. The high sampling rates for the principal arterial, minor arterial, and collector roadways provide an indicator of data reliability, considering that samples from all non-high use areas were randomly selected. Because the total miles of residential streets is quite large (1,353 miles), the sampling rate of residential streets is very low. Furthermore, the variability among residential streets was found to be high. Consequently, the small sample that could be accomplished under this project should not be used as a statistical representation of all residential streets throughout the City. However, the sample does provide a qualitative view of the conflicts which may be found on residential streets.

### **SURVEY METHODOLOGY**

The field survey was conducted using the following methodology:

- Each segment of the roadways included in the sample was field surveyed by a technician. Maps of City streets were used to record the field data for the citywide sample and aerial photographs were used to record the data for high use areas.
- Non-compliant items were noted and recorded for each location. The information recorded for each item included:
  - \* type of conflict
  - \* location of conflict
  - \* ownership of non-compliant item
  - \* potential mitigation opportunities

All the information compiled in the field was transferred to an electronic database for further processing and analysis.

### **DATA EXPANSION AND ANALYSIS PROCEDURES**

As previously noted, the sampling was stratified by roadway classification within City Council Districts. Because of the varying sample sizes among districts and roadway types due to the varying

geographic sizes of the Districts, a non-compliance incident per mile rate was developed for use in expanding the sample data to the universe for each council district. For example, in Council District 6 it was found that on the principal arterials sampled there were 137 locations where there was no curb ramp at an intersection. Since there was a total of 4.59 miles of principal arterials sampled in District 6, a rate of 29.85 incidents per principal arterial mile was calculated. There are 13.2 total miles of principal arterials in District 6. Multiplying the rate by the total miles of principal arterial in the District provided an estimate of 394 total incidents of missing curb ramps in District 6. By utilizing an average unit cost per violation, an estimated compliance cost was obtained (unit cost data is provided in Chapter 4). The Council District estimates were added together to provide a Citywide estimate.



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### **3. SURVEY RESULTS**

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#### **SURVEY SUMMARY**

Appendix B contains the summarized results of the survey for the City as a whole. These sheets show the type of conflict or violation, the number of incidents of that violation found in the survey, the sample street miles by class, the violation rate, the total street miles by class, and the estimated total violations by street class and district for each type of conflict or violation. This section provides a summary of that data.

In terms of violations on a Citywide basis, extrapolation of the sample data indicates that there are about 25,750 incidents of non-compliance within the City related to major streets (arterials and collectors) for an average rate of almost 74 incidents per mile. Both principal and minor arterials have an average violation rate of over 70 per mile while collectors have an average violation rate of about 80 per mile.

The most prevalent problem types along major streets were related to curb ramps and the areas where driveways cross sidewalks. It is estimated that there are about 12,600 sidewalk crossings and 8,900 curb ramps that do not meet the ADA standards. This computes to an average conflict rate for major streets of 36.0 per mile for sidewalk crossings by driveways and 25.4 per mile for curb ramps. In terms of roadway class, 36% of the driveway violations are estimated to occur on collectors, 35% on principal arterials, and the remaining 28% on minor arterials. Conversely, curb ramp violations are estimated to occur more frequently on principal arterials (42%) with collectors estimated to account for 33% of the violations, and minor arterials accounting for the remaining 24%.

No other problem type had a violation rate higher than 5 per mile. The next highest area was the category of sidewalks which had an estimated 1,434 violations citywide. Principal arterials were estimated to contain 40% of the violations with minor arterials next with 32%. The remaining 29% are estimated to occur on collectors.

It is important to understand that these statistics are reflective of the total violations of a standard and do not reflect the seriousness of the violation. For example, by standard the maximum running slope of a curb ramp is 1:12. Because the data could not be expanded with reliability and would have been expensive to encode in the data base, the scope of the project did not include collection of data to

indicate whether the violation was a slope of 1:11 or 1:2; only that that the slope did not meet the ADA criteria. Obviously, the first example is not nearly as serious a problem as the second example.

The following statistics provide a different view of the problem. While there are numerous problem areas as have been previously noted, some situations could be considered as being more serious. For example, if there is no curb ramp or the curb ramp is blocked, or if there is no sidewalk or the sidewalk is blocked, these would be more serious problems for a disabled person. In combining what are some serious problems for the disabled community rather than viewing each type of conflict individually, the data show that there are approximately 4,191 instances where there is no curb ramp or the existing one is obstructed and about 1,588 instances where there is no sidewalk or the existing sidewalk is obstructed. This equates to an overall estimated number of nearly 5,800 conflicts within the City which could be considered serious, and should be considered as high priority for mitigation. Exhibit 3 shows a summary of both the highest violations (driveways and curb ramps) and the more serious violations (no sidewalk or sidewalk obstructions and no curb ramp or curb ramp obstructions) for the City, each council district, and some selected high use areas. It is important to note that for some high use areas such as Old Town, residential streets are a large portion of the streets within the area. The information shown in the table is only for the major streets in the area in order to provide comparable data for each area.

A comparison of data by district shows that Council District 2 generally has the most non-compliance problems. This is not surprising since it is one of the older areas of the City. Council District 2 also has the most serious composite problem of no sidewalk or obstructed sidewalk although Council Districts 5, 6, and 7 clearly have the most estimated conflicts when considering the composite problem of no curb ramps or obstructions to curb ramps.

When comparing the number of violations in the major high use areas, UNM consistently has the most problems. Oldtown and Downtown generally were the next most problematic high use areas.

While statistics for residential streets are not provided because of the low sampling rate, the data which were collected showed clearly that the same problems predominate in residential areas (driveway and curb ramp conflicts) as were found along major streets. Even in newer residential areas a high percentage of the driveway slopes should be expected to be in non-compliance unless the area has rolled curbs. It should also be expected that, in older neighborhoods especially, sidewalk problems will be even more prevalent because of the propensity of sidewalk cracking by tree roots. Residential areas should also be anticipated to lack curb ramps to a much greater degree than along major streets. However, as was discussed previously, the small sample and wide variations among residential areas preclude providing any meaningful quantitative information. In addition, problems associated with residential streets are handled on a case by case basis as requests are received by City staff.

**EXHIBIT 3  
SELECTED NON-COMPLIANCE SUMMARIES FOR MAJOR STREETS**

<b>Area</b>	<b>Driveways [Total (Rate)]</b>	<b>Curb Ramps [Total (Rate)]</b>	<b>No Sidewalks or Obstructions [Total (Rate)]</b>	<b>No Curb Ramp or Obstructions [Total (Rate)]</b>
Council District 1	218 (3.6)	806 (13.4)	177 (2.9)	117 (1.9)
Council District 2	4,240 (73.2)	1,795 (31.0)	415 (7.2)	575 (9.9)
Council District 3	1,696 (39.8)	879 (15.4)	321 (5.6)	359 (6.3)
Council District 4	529 (14.2)	629 (16.9)	102 (2.7)	181 (4.9)
Council District 5	1,770 (48.4)	1,433 (39.2)	230 (6.3)	859 (23.5)
Council District 6	1,393 (61.6)	1,066 (47.2)	143 (6.3)	870 (38.5)
Council District 7	1,881 (62.2)	1,211 (40.1)	133 (4.4)	786 (26.0)
Council District 8	342 (11.6)	533 (18.0)	40 (1.4)	96 (3.2)
Council District 9	533 (29.1)	549 (30.0)	27 (1.5)	348 (19.0)
<b>Total City</b>	<b>12,601 (36.0)</b>	<b>8,902 (25.5)</b>	<b>1,588 (4.5)</b>	<b>4,191 (12.0)</b>
Downtown	129 (14.9)	164 (19.0)	24 (2.8)	65 (7.5)
Old Town	76 (62.0)	48 (38.6)	4 (3.2)	13 (10.4)
Uptown	72 (23.6)	111 (36.5)	5 (1.6)	34 (11.2)
UNM - Main	250 (33.1)	287 (38.0)	59 (7.8)	153 (20.2)
UNM -South	10 (5.1)	42 (21.6)	15 (7.7)	33 (17.0)
State Fair Grounds	146 (58.7)	74 (29.8)	11 (4.4)	38 (15.3)

Note: Data for High Use Areas are included in Citywide and appropriate Council District totals.

### **STREET LIGHT POLES**

A special area of concern by the City was the issue of street light poles. Because it was not possible to determine ownership of the poles just by appearance, a special database was constructed which identified the number of poles within the surveyed segment and the number in violation by ownership. This data was used in establishing the ownership and cost responsibility for correcting the violations on a citywide basis.

According to data provided by the City, there are about 19,600 street light poles in the City of Albuquerque. Approximately 10,200 (52%) of the poles are owned by The Public Service Company of New Mexico (PNM) with about 9,400 owned by the City. The street segments surveyed contained about 2,200 PNM poles and 750 City poles representing approximately 21% of all PNM poles and 8% of all City poles.

Of the poles included in the survey, 133 (4.5%) were determined to be in non-compliance. The majority of the violations are for blocking a sidewalk. Of the non-compliant poles surveyed, 125 (94%) were owned by PNM and 8 (6%) were owned by the City. When the sample data are expanded based on ownership, it is estimated that there are approximately 580 non-compliant poles owned by PNM and 100 owned by the City. This data should be viewed as being conservative since the sample base was developed from a street segment data base and not a street light database. However, it does appear that the number of violations is relatively small.

### **OWNERSHIP**

For the most part, assumptions related to ownership are straight forward. Public streets and associated curb ramps, traffic signals, water and sewer facilities, and street signs were considered to belong to the City. Sidewalks, trees, and driveways as well as advertising signs were considered to belong to the property owner and to be private. Since it would have required an extensive records search, no distinction was made as to whether the property owner was a governmental entity, a private corporation, or a private individual. Utility poles, with the exception of street light poles discussed above were considered to belong to the utility, and thus were also coded as private. While this information is useful, it does not automatically identify who may be responsible for correcting any deficiencies as discussed in more detail in Chapter 4.

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## 4. MITIGATION MEASURES, COST ESTIMATES, AND FUNDING

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### MITIGATION MEASURES AND COST ESTIMATES

Mitigating non-compliant instances can be accomplished in several ways. For example, if a light pole were blocking a sidewalk, either the pole can be moved or the sidewalk widened to go around the pole. In order to develop cost estimates for bringing the City into compliance, it was necessary to identify possible mitigation measures for each non-compliant situation. For this study it was assumed that the lower cost mitigation measure for each situation was the preferred mitigation. It was also assumed that the necessary construction would occur in large volumes and therefore at lower costs than if each item was constructed separately. The following were considered to be appropriate mitigation measures (and codes) used in estimating the costs shown in Appendix C. A more detailed cost table is also included in Appendix C.

TABLE 3  
MITIGATION MEASURES AND UNIT COSTS

<u>Mitigation Measure (code)</u>	<u>Unit Cost</u>
Modify the existing sidewalk (MS)	\$300 - \$800
Install new sidewalk (IS)	\$12 per lin. ft.
Widen sidewalk - bypass obst. (WSN)	\$100
Widen sidewalk - increase width (WS)	\$6 per lin. ft.
Relocate curb ramp (RC)	\$1,400
Install new curb ramp (IC)	\$800
Modify existing curb ramp (MC)	\$800
Relocate loading zone (RL)	\$600
Cut tree branches (CUT)	\$100
Modify driveway (MD)	\$2,100
Move the object (MV)	\$100 - \$5,000
No action (NA)	\$0

It was also assumed that a standard average unit cost could be applied for each potential mitigation as shown above. Average unit costs were derived based on the City's unit cost estimates and then increased by 30% to account for inflation and more recent experience by consultants. Average unit



costs do not include engineering and design fees, inspection costs, general contingencies, nor right-of-way costs. The summary results of the Citywide cost estimate for each conflict are shown in Appendix C. For each line item a mitigation measure and an average unit cost is included. This methodology results in an estimated construction cost to correct all deficiencies of \$43.9 million dollars. It was assumed that this cost could increase by at least 30% when contingencies, design and engineering fees, etc. were included, resulting in a total of \$57.1 million. If a minimum easement cost of \$250 per conflict is assumed to begin to account for additional right-of-way needed, an additional \$6.5 million could be added to the cost estimates resulting in a total estimated cost of \$63.6 million. This number should still be considered as a minimum because of the generalized nature of the study. In addition, right-of-way costs will vary greatly by Council District or High Use Area. For example, a large percentage of land in the Downtown is owned by the City, the County, or the Federal government. Thus right-of-way costs in this area will be much lower than for an area where property ownership is almost exclusively private.

While this approach provides planning level costs, it is probable that many of the non-compliance locations will involve other considerations such as slope of adjacent terrain, drainage considerations, types of obstacles causing the non-compliance, obstacles to simple solutions such as a high retaining wall or building abutting a substandard sidewalk, etc. Consequently, the mitigation measures suggested may not be the most appropriate for each and every situation throughout the City. In fact, in some instances mitigation of the conflict may be considered unreasonable. However, the estimates developed were considered a reasonable average based on an initial inspection accomplished during the survey

Excluding right-of-way costs, the total estimated mitigation cost for major streets as calculated above is about \$57.1 million. Based on ownership assumptions discussed previously, approximately \$11.5 million of the total is clearly the responsibility of the City. As discussed in the next section, it is unclear as to the responsibility for the remaining costs. It is not surprising that Council Districts 2 and 3 (some of the older parts of Albuquerque) have the highest estimated costs to achieve compliance. However, when examining the City costs, Council Districts 2, 3, 5, 6, and 7 all have estimates of over \$1 million. Summaries of the cost estimates excluding right-of-way for each of the Council Districts and major high use areas are shown in Exhibit 4.

While the costs shown in Exhibit 4 do not reflect the total cost for the City as a whole, it is apparent that the total costs will be extremely high. For example, it was noted earlier that the majority of driveways throughout the City were estimated to be in non-compliance. There are approximately 1,350 miles of residential streets in the City. Using the rate of 36.0 conflicts per mile which is the City average shown in Exhibit 3, calculations would suggest that there are 48,600 driveways on residential streets that are in non-compliance. At an average of \$2,100 to replace a driveway pad, it would cost over \$100 million just to bring the driveways on residential streets into compliance. However, since the sample of residential streets was not statistically valid, calculations for residential streets are not reliable. In addition, the high potential cost exemplified by the estimated \$100 million calculated above may justify

**EXHIBIT 4**  
**SELECTED COST SUMMARIES FOR MITIGATION MEASURES**  
**ON MAJOR STREETS**

<b>Area</b>	<b>Total Cost</b>	<b>City Cost</b>
Council District 1	\$6,070,000	\$870,000
Council District 2	\$14,950,000	\$2,180,000
Council District 3	\$8,268,000	\$1,537,000
Council District 4	\$4,672,000	\$684,000
Council District 5	\$6,950,000	\$1,837,000
Council District 6	\$5,398,000	\$1,375,000
Council District 7	\$6,943,000	\$1,769,000
Council District 8	\$1,612,000	\$627,000
Council District 9	\$2,274,000	\$641,000
<b>Total City</b>	<b>\$57,137,000</b>	<b>\$11,520,000</b>
Downtown	\$837,000	\$404,000
Old Town	\$247,000	\$56,000
Uptown	\$339,000	\$140,000
UNM - Main	\$1,232,000	\$413,000
UNM -South	\$261,000	\$46,000
State Fair Grounds	\$482,000	\$82,000

Note: Costs for High Use Areas are included in Council District costs as appropriate. Estimates exclude right-of-way costs.

the current City approach of dealing with residential areas on a case by case basis, if that is considered reasonable.

### **FUNDING**

There are a variety of funding options which may be used in correcting the deficiencies. Since the ADA was an "unfunded mandate", virtually all of the funding resources will be in competition with other projects or activities. Also, there are limitations on the use of certain funds. The following is a listing of the potential general funding sources:

- federal grants
- state grants
- local public funds
- private funds - either corporate or private individual

### **Funding Approach**

The ADA regulations require that any time a facility which is not in compliance is modified or improved, the modifications must include improvements that will bring the facility into compliance with the ADA. Consequently, the funding of many of the necessary improvements will be associated with the source of funds used in modifying or maintaining the facility. These resources will generally be transportation resources since the problems identified were associated with streets. They will be a combination of Federal, State, and City resources. This is the most cost effective way of making the improvements needed.

Identifying the resources which could be used to correct deficiencies prior to normal maintenance is uncertain since it is unclear as to whose responsibility it is to make the improvements. Based on information in the regulations and obtained through a discussion with the City's legal staff, it is clear that all facilities serving the public must be brought into compliance if it is reasonable to do so. This means that the City is responsible for making the necessary improvements to those facilities it owns. It appears that the owners of other facilities open to the public would also be responsible for the necessary improvements to their facilities, and it may be considered good business if the owners of commercial properties made the modifications regardless of the real responsibility.

Some of the unclear areas are also the source of a large percentage of the violations. For example, owners of residential property are responsible for the maintenance of the sidewalk on their property and would be responsible for sidewalk repairs where it was clearly a maintenance problem such as tree roots cracking or uplifting the sidewalk. However, when the sidewalk is in good repair and was installed to the codes of the time of installation, the responsibility for making the necessary modifications is unclear. This is also true of other facilities including utility poles. Consequently, the source of funds which can be used in upgrading the facility is unclear. For example, if the upgrading is the property owners responsibility, assessment districts could be created whereby the property owners

would be responsible for the costs which could be amortized over a period of time. However, if the City is responsible, perhaps a general or specialized bond or tax will be necessary to fund the improvements. As with many such regulations, many of the details including defining what improvements are reasonable and who is responsible for the upgrades will be established through court cases. This in turn will help determine the source of eligible funds to make the upgrades.

### **REVIEW OF EXISTING CITY STANDARDS AND SPECIFICATIONS**

As part of this project, existing City of Albuquerque standard specifications for construction were reviewed to determine the degree of compliance with the Americans with Disability Act. This review contrasted the "City of Albuquerque Standard Specifications for Public Works Construction" with the "ADA Accessibility Guidelines" (ADAAG; Appendix A to part 36 of the ADA) and the Interim Federal Rule for 36 CFR Part 1191 (June 20, 1994) which updates Chapter 14 of the regulations. In addition, parts of the City's "Development Process Manual" (DPM) were reviewed.

Aspects of the City's specifications relating to streets and roadways were included in the review. Thus, this task focused on specifications pertinent to providing an accessible route within a roadway corridor. Key factors effecting route accessibility include barriers, protruding objects, surface defects, longitudinal slopes, cross slopes, and width of route. Examples of these factors are:

- *barrier* -- light poles, traffic signal poles, power poles, curbs, raised medians, mailboxes, signs, parking meters, pedestals, bus benches, trash receptacles
- *protruding objects* -- tree limbs, signs, public telephones, parked vehicles
- *surface defects* -- slick surfaces, no sidewalk, storm-water grate design/placement, changes in levels
- *longitudinal slopes* -- (parallel to direction of travel) - ramp design, sidewalk design, drivepad design
- *cross slopes* -- (perpendicular to direction of travel) - drivepad design, curb ramp design, sidewalk design
- *width of route* -- narrow sidewalks, parking space design, handicap loading zone design

The results of the review are detailed in Appendix D of this report. In general, the City's specifications are satisfactory. ADA compliance will be achieved largely through the actions of the project managers and construction workers since they must work with varying conditions and adapt the standards to meet those conditions. Because of the high variability in the aspects of providing an accessible route, the standard specifications cannot describe all treatments required to address actual site conditions that may be encountered. Consequently, the ADAAG must be implemented based on engineering judgment and with sensitivity to each unique situation.

It should be noted that there also is a committee of City staff identifying required modifications to the City's standard specifications for construction. It is recommended that the results of the

committee's findings and the modifications identified as part of this project be combined to develop a revised set of standard specifications.

It is clear that regardless of how many standards exist, there are so many variables for any given site that regulations which adequately address the problem will be difficult if not impossible to develop. There should be an attempt to place general language in the City standards to the effect that regardless of any specific standard, the end result of the construction must be in compliance with the ADA guidelines. This means that if it is reasonable to meet the standards, then they must be met. However, there will be situations where it is not reasonable to meet the standards. There may be more instances of this when small commercial establishments attempt to meet the standards than when larger commercial operations or governmental entities attempt to meet them. It is clear that sensitivity to the issue should be a strong guiding factor, not just meeting the "letter of the law".



**APPENDIX A**

***Roadway Sample Universe***

# SUMMARY OF ROADWAYS SAMPLED

Area	ROADWAY	From	To	City District #	Type of Rd. (W)	Length (Miles)	Roadway Class	Miles Sampled	District Total Miles	Percent Sampled
	Coors Blvd.	Redlands Rd.	Cunry	1	PA	0.42	PA	3.75	25.5	14.7%
	Coors Rd.	Illiff	Fortuna	1	PA	0.63	MA	2.14	13.3	16.1%
	McMahon Blvd.	Unser Blvd.	Golf Course Rd.	1	PA	1.37	CO	1.05	21.4	4.9%
	Montano	Unser	Taylor Ranch	1	PA	1.33	RS	0.42	288.3	0.1%
	Golf Course Rd.	Irving	Ellison(Mc Mahon)	1	MA	0.49	TOTAL	7.35	348.5	2.1%
	Irving Blvd.	Golf Course Rd.	Coors Blvd.	1	MA	1.65				
	Taylor Ranch	Calle Noriana	Golf Course Rd.	1	CO	1.05				
	Dolores Dr.	Fortuna	Hanover	1	RS	0.42				
	Alameda Blvd.	Edith Blvd.	Jefferson St.	2	PA	0.88	PA	3.96	23.6	16.8%
Old Town	Candelaria Rd.	I-25	Carlisle Blvd.	2	PA	1.23	MA	3.52	21.5	16.4%
	Central	Tringley Dr.	Lomas	2	PA	0.74	CO	0.56	12.8	4.4%
	Manaul Blvd.	University Blvd.	Carlisle Blvd.	2	PA	1.12	RS	1.73	164.0	1.1%
	12th St.	Candelaria Rd.	Manaul Blvd.	2	MA	0.70	TOTAL	9.77	221.9	4.4%
	4th St.	Candelaria	Griegos	2	MA	0.70				
	Broadway Blvd.	Manaul Blvd.	I-40	2	MA	0.32				
Old Town	Montano Rd.	4th St.	2nd St.	2	MA	0.25				
Old Town	Mountain	Rio Grande	Old Town Rd.	2	MA	0.23				
Old Town	Rio Grande	Central	Mountain	2	MA	0.28				
	Rio Grande Blvd.	Candelaria Rd.	Indian School	2	MA	1.05				
Old Town	Griegos Rd.	Rio Grande Blvd.	Michelle	2	CO	0.56				
Old Town	18th St.	Old Town Rd.	Mountain	2	RS	0.18				
Old Town	Charlevoix	San Felipe	Romero	2	RS	0.07				
Old Town	Church	Romero	San Felipe	2	RS	0.07				
Old Town	Old Town Rd.	Mountain	San Pasquale	2	RS	0.25				
Old Town	Romero	Central	Rio Grande/Mountain	2	RS	0.35				
Old Town	San Felipe	Central	Mountain	2	RS	0.28				
Old Town	San Isidro	Griegos Rd.	Cherokee Rd.	2	RS	0.46				
Old Town	South Plaza	Rio Grande	San Felipe	2	RS	0.07				
Downtown	Central	12th Street	Broadway	3	PA	1.02	PA	12.99	22.9	56.7%
UNM	Central	I-25	Washington	3	PA	2.35	MA	5.45	23.3	23.4%
	Central Ave.	Unser Blvd.	Coors Blvd.	3	PA	0.70	CO	1.65	10.8	15.3%
	Central Ave.	Lomas Blvd.	12th St.	3	PA	0.63	RS	1.73	133.8	1.3%
Downtown	Coal	12th Street	Broadway	3	PA	0.95	TOTAL	21.61	190.8	11.4%
Roosevelt Park	Coal	Spruce	Sycamore	3	PA	0.07				
Downtown	Coors Blvd.	Central Ave.	Bridge Blvd.	3	PA	0.77				
Downtown	Copper	Second	Sixth	3	PA	0.28				
Downtown	Fifth	Gold	Lomas	3	PA	0.53				
Downtown	Gibson Blvd.	I-25	University Blvd.	3	PA	0.39				
Downtown	Gold	Second	Sixth	3	PA	0.28				
Downtown	Lead	12th Street	Broadway	3	PA	0.95				

\* PA: Principal Arterial, MA: Minor Arterial, CO: Collector, RS: Residential

SUMMARY OF ROADWAYS SAMPLED

Area	ROADWAY	From	To	City District #	Type of Fcd. Wk.*	Length (Miles)	Roadway Class	Miles Sampled	District Total Miles	Percent Sampled
Downtown	Lomas	12th Street	Broadway	3	PA	0.98				
Downtown	Lomas Blvd.	Broadway Blvd.	I-25 W. Ramps	3	PA	0.53				
Downtown	Marquette	Second	Sixth	3	PA	0.28				
Downtown	Second	Central	Lomas	3	PA	0.48				
Downtown	Sixth	Gold	Lomas	3	PA	0.53				
UNM South Campus:	Stadium	Yale	University	3	PA	0.49				
Downtown	Third	Gold	Lomas	3	PA	0.53				
Downtown	Tijeras	Second	Sixth	3	PA	0.28				
Downtown	Broadway Blvd.	Coal Ave.	Bridge Blvd.	3	MA	0.70				
Downtown	Fourth	Central	Gold	3	MA	0.07				
Downtown	Fourth	Lomas	Marquette	3	MA	0.21				
Downtown	Martin Luther King	Broadway	University	3	MA	1.05				
UNM	Second St.	Bridge Blvd.	Coal	3	MA	0.70				
UNM South Campus:	University	Indian School	Stadium	3	MA	2.17				
UNM South Campus:	University	Stadium	Sunshine Terraces	3	MA	0.30				
UNM	Yale Blvd.	Central Ave.	Lead Ave.	3	MA	0.25				
UNM	Girard	Lomas	Coal	3	CO	0.81				
Downtown	Mountain Rd.	4th St.	Edith Blvd.	3	CO	0.58				
UNM South Campus:	Roma	Second	Sixth	3	CO	0.28				
UNM South Campus:	Buena Vista	Central	Anderson	3	RS	1.18				
UNM South Campus:	Edith Blvd.	Central	Lomas Blvd.	3	RS	0.48				
Roosevelt Park	Spruce	Hazeldeins	Coal	3	RS	0.11				
	San Mateo Blvd.	Osuna Rd.	McLeod Rd.	4	PA	0.42	PA	2.91	8.2	35.4%
	Wyoming Blvd.	San Francisco Rd.	San Antonio Dr.	4	PA	0.42	MA	3.85	11.5	33.5%
	Wyoming Blvd.	Osuna Rd.	Montgomery Blvd.	4	PA	0.46	CO	0.53	17.6	3.0%
	Wyoming Blvd.	San Antonio Dr.	Academy Rd.	4	PA	1.12	RS	0.49	128.5	0.4%
	Wyoming Blvd.	Passo del Norte	San Francisco Rd.	4	PA	0.49	TOTAL	7.77	185.8	4.7%
	Academy Rd.	Wyoming Blvd.	Ventura St.	4	MA	0.88				
	Harper	Wyoming Blvd.	Ventura St.	4	MA	1.19				
	Louisiana Blvd.	Passo del Norte	San Antonio Dr.	4	MA	0.86				
	San Pedro Blvd.	Osuna Rd.	Montgomery Blvd.	4	MA	0.81				
	Barstow St.	Pelomas Ave.	Capulin	4	CO	0.53				
	Capulin Rd.	Barstow St.	Ruidoso Rd.	4	RS	0.49				
State Fair Grounds	Central	Louisiana	San Pedro	5	PA	0.53	PA	7.15	14.1	50.7%
UNM	Lomas	University	San Mateo	5	PA	2.24	MA	4.00	12.1	33.0%
State Fair Grounds	Lomas	San Pedro	Louisiana	5	PA	0.49	CO	3.94	10.4	37.9%
Uptown Area	Louisiana	America's Pk. WY.	Manual	5	PA	0.83	RS	1.02	135.6	0.8%
State Fair Grounds	Louisiana	Lomas	Central	5	PA	0.77	TOTAL	16.10	172.2	9.3%
	Manual Blvd.	San Mateo Blvd.	San Pedro Dr.	5	PA	0.49				
	Manual Blvd.	Washington St.	San Mateo Blvd.	5	PA	0.49				
Uptown Area	Manual	Louisiana	San Pedro	5	PA	0.49				

\* PA: Principal Arterial, MA: Minor Arterial, CO: Collector, RS: Residential

**SUMMARY OF ROADWAYS SAMPLED**

Area	ROADWAY	From	To	City District #	Type of Rd. Wye*	Length (Miles)	Roadway Class	Miles Sampled	District Total Miles	Percent Sampled
Uptown Area	San Mateo Blvd.	Montgomery Blvd.	Comanche Rd.	5	PA	0.53				
	San Mateo Blvd.	Indian School Rd.	Constitution	5	PA	0.49				
	Candelaria Rd.	San Pedro Dr.	Louisiana Blvd.	5	MA	0.49				
	Carlisle Blvd.	Indian School Rd.	Constitution	5	MA	0.49				
	Carlisle Blvd.	Comanche Rd.	Candelaria Rd.	5	MA	0.49				
	Indian School	San Pedro	Pennsylvania	5	MA	1.02				
	Indian School Rd.	San Mateo Blvd.	San Pedro Blvd.	5	MA	0.49				
	Indian School Rd.	Carlisle Blvd.	San Mateo Blvd.	5	MA	1.02				
	America's Pkwy. loop	Louisiana	Louisiana	5	CO	0.32				
	Constitution	Carlisle	San Mateo	5	CO	1.02				
Uptown Area	San Pedro	Lomas	Constitution	5	CO	0.49				
	San Pedro	Indian School	Manual	5	CO	0.39				
State Fair Grounds	San Pedro	Central	Lomas	5	CO	0.70				
Uptown Area	Uptown Blvd.	San Pedro	Louisiana	5	CO	0.53				
	Washington St.	Indian School	Constitution	5	CO	0.49				
State Fair Grounds	California	Central	Domingo	5	RS	0.14				
State Fair Grounds	Domingo	San Pedro	California	5	RS	0.14				
State Fair Grounds	Linn Ave.	San Pedro	Fair Grounds	5	RS	0.25				
	Morning Side	Indian School	Constitution	5	RS	0.49				
Loveland Hospital	Central Ave.	Zuni Rd.	Eubank Blvd.	6	PA	0.77	PA	4.59	13.2	34.7%
	Coal Ave.	Aliso	Washington St.	6	PA	0.35	MA	1.05	1.5	70.0%
	Gibson	San Mateo	San Pedro	6	PA	0.49	CO	0.60	7.9	7.6%
	Louisiana	Zuni	Gibson	6	PA	0.98	RS	0.91	110.1	0.8%
	Wyoming Blvd.	Zuni Rd.	Kirtland Gate	6	PA	0.48	TOTAL	7.15	132.7	5.4%
	Wyoming Blvd.	Lomas Blvd.	Copper Ave.	6	PA	0.49				
	Zuni Rd.	Louisiana Blvd.	Wyoming Blvd.	6	PA	1.05				
	Carlisle	Coal	Ridgecrest	6	MA	0.14				
	Carlisle Blvd.	Burton	Gibson Blvd.	6	MA	0.91				
	Ridgecrest	Carlisle	Pershing	6	CO	0.25				
Nobhill Residential Area	Ridgecrest Dr.	Pershing	Sierra	6	CO	0.35				
	Aliso	Pershing	Coal	6	RS	0.35				
Nobhill Residential Area	Monroe	Zuni	Quincy	6	RS	0.42				
	Pershing	Ridgecrest	Aliso	6	RS	0.14				
Nobhill Residential Area	Eubank	Candelaria	Indian School	7	PA	0.98	PA	5.22	12.6	41.4%
	Lomas Blvd.	I-40 N. Ramps	Eubank Blvd.	7	PA	0.60	MA	1.51	7.8	19.3%
	Louisiana Blvd.	I-40	Lomas Blvd.	7	PA	0.49	CO	0.49	9.8	5.0%
	Manual Blvd.	Pennsylvania St.	Wyoming Blvd.	7	PA	0.49	RS	0.49	121.4	0.4%
	Manual Blvd.	Moon St.	Eubank Blvd.	7	PA	0.49	TOTAL	7.70	151.6	5.1%
	Montgomery Blvd.	Eubank Blvd.	Morris St.	7	PA	0.49				
	Wyoming Blvd.	Indian School Rd.	I-40	7	PA	0.70				
	Wyoming Blvd.	Montgomery	Candelaria	7	PA	0.98				

\* PA: Principal Arterial, MA: Minor Arterial, CO: Collector, RS: Residential

### SUMMARY OF ROADWAYS SAMPLED

Area	ROADWAY	From	To	City District #	Type of Rd. W/M*	Length (Miles)	Roadway Class	Miles Sampled	District Total Miles	Percent Sampled
	Candelaria Rd.	Wyoming Blvd.	Eubank Blvd.	7	MA	1.02				
	Manuel Blvd.	Morris St.	Juan Tabo Blvd.	7	MA	0.49				
	Moon St.	Constitution Ave.	Indian School Rd.	7	CO	0.48				
	Persifal	Constitution Ave.	Indian School Rd.	7	RS	0.49				
	Eubank Blvd.	Academy Rd.	Juan Tabo Blvd.	8	PA	0.48	PA	3.99	12.5	31.9%
	Eubank Blvd.	Juan Tabo Blvd.	Leyton Ave.	8	PA	0.25	MA	3.78	7.6	49.7%
	Juan Tabo Blvd.	Spain Rd.	Montgomery Blvd.	8	PA	0.77	CO	0.49	9.5	5.2%
	Juan Tabo Blvd.	Montgomery Blvd.	Montgomery Blvd.	8	PA	0.88	RS	0.39	139.5	0.3%
	Tramway Blvd.	Montgomery Blvd.	Comanche Rd.	8	PA	0.49	TOTAL	8.65	189.1	5.1%
	Tramway Blvd.	Spain Rd.	Manitoba Dr.	8	PA	0.53				
	Tramway Blvd.	Comanche Rd.	Candelaria Rd.	8	PA	0.53				
	Candelaria Rd.	Juan Tabo Blvd.	Tramway Blvd.	8	MA	1.02				
	Leyton Ave.	Academy Rd.	Eubank Blvd.	8	MA	0.70				
	Spain Rd.	Eubank Blvd.	Juan Tabo Blvd.	8	MA	0.95				
	Spain Rd.	Juan Tabo Blvd.	Tramway Blvd.	8	MA	1.12				
	Lowell St.	Spain Rd.	Academy Rd.	8	CO	0.49				
	San Victorito	Vista Bonita	Lowell St.	8	RS	0.39				
	Juan Tabo Blvd.	Lomas Blvd.	I-40	9	PA	0.63	PA	3.01	9.4	32.0%
	Lomas Blvd.	Morris St.	Juan Tabo Blvd.	9	PA	0.63	MA	0.00	0.0	n.a.
	Lomas Blvd.	Eubank Blvd.	Morris St.	9	PA	0.35	CO	0.49	8.9	5.5%
	Lomas Blvd.	Juan Tabo Blvd.	Chelwood Park	9	PA	0.49	RS	0.49	131.5	0.4%
	Tramway Blvd.	Cloudbier	I-40 N. Ramps	9	PA	0.42	TOTAL	3.99	149.8	2.7%
	Tramway Blvd.	Lomas Blvd.	Copper Ave.	9	PA	0.49				
	Chelwood Park Blvd.	Copper Ave.	Lomas Blvd.	9	CO	0.49				
	Misquetis	Chelwood Park	Tramway Blvd.	9	RS	0.49				

\* PA: Principal Arterial, MA: Minor Arterial, CO: Collector, RS: Residential



**APPENDIX B**

***Summary of Sample Data By Type of Non-compliance  
for Major Roadways***

**CITY-WIDE ADA NON-COMPLIANCE SUMMARY  
FOR MAJOR ROADWAYS**

Non-Compliance Issue/ MUTCD Code	PRINCIPAL ARTERIALS		MINOR ARTERIALS		COLLECTORS		TOTAL VIOLATIONS
	#	%	#	%	#	%	
<b>1. Traffic Signal Pole</b>	<b>52</b>	<b>46%</b>	<b>15</b>	<b>13%</b>	<b>47</b>	<b>41%</b>	<b>114</b>
<b>a. Obstructing sidewalk</b>	<b>45</b>	<b>53%</b>	<b>8</b>	<b>7%</b>	<b>34</b>	<b>40%</b>	<b>85</b>
WSN	40	71%	3	5%	13	23%	56
MV							
NA							
MV/NA	5	16%	3	11%	21	73%	29
<b>b. Obstructing curb ramps</b>	<b>7</b>	<b>26%</b>	<b>9</b>	<b>31%</b>	<b>13</b>	<b>45%</b>	<b>29</b>
RC	7	26%	9	31%	13	45%	29
<b>2. Traffic Signal Controller Cabinet</b>	<b>7</b>	<b>88%</b>			<b>3</b>	<b>26%</b>	<b>10</b>
<b>a. Obstructing sidewalk</b>	<b>7</b>	<b>88%</b>			<b>3</b>	<b>26%</b>	<b>10</b>
WSN	7	100%					7
MV							
NA							
MV/NA					3	100%	3
<b>3. Signalized Intersection Islands</b>	<b>36</b>	<b>56%</b>	<b>28</b>	<b>44%</b>			<b>63</b>
<b>a. No curb ramp</b>	<b>24</b>	<b>61%</b>	<b>22</b>	<b>47%</b>			<b>46</b>
IC	24	51%	22	47%			46
<b>b. Curb ramp not aligned with crosswalk</b>	<b>11</b>	<b>64%</b>	<b>6</b>	<b>36%</b>			<b>17</b>
RC	11	64%	6	36%			17
<b>4. Signalized Intersection Crosswalks</b>	<b>544</b>	<b>57%</b>	<b>149</b>	<b>18%</b>	<b>254</b>	<b>27%</b>	<b>947</b>
<b>a. Curb ramp not aligned with crosswalk</b>	<b>544</b>	<b>57%</b>	<b>149</b>	<b>18%</b>	<b>254</b>	<b>27%</b>	<b>947</b>
RC	544	57%	149	16%	254	27%	947
<b>5. Curb Ramp (City Street/Private Dr./Way)</b>	<b>3,759</b>	<b>42%</b>	<b>2,155</b>	<b>24%</b>	<b>2,977</b>	<b>33%</b>	<b>8,901</b>
<b>a. Surface</b>	<b>18</b>	<b>64%</b>	<b>9</b>	<b>36%</b>			<b>25</b>
MC	18	64%	9	36%			25
<b>b. Slope of ramp &gt;1:12 or flare side &gt;1:10</b>	<b>2,160</b>	<b>45%</b>	<b>1,249</b>	<b>26%</b>	<b>1,403</b>	<b>29%</b>	<b>4,812</b>
MC	2,160	45%	1,249	26%	1,403	29%	4,812
<b>c. Width of ramp &lt;36"</b>	<b>6</b>	<b>100%</b>					<b>6</b>
MC	6	100%					6
<b>d. No ramp</b>	<b>1,565</b>	<b>39%</b>	<b>907</b>	<b>22%</b>	<b>1,575</b>	<b>39%</b>	<b>4,047</b>
IC	1,565	39%	907	22%	1,575	39%	4,047
<b>e. Slope of Adjacent road surface &gt;1:20</b>	<b>12</b>	<b>100%</b>					<b>12</b>
NA							
<b>g. Width of adjacent sidewalk &lt;48"</b>							
RC							
MC							
WSN							
<b>6. Traffic Sign Pole (i.e. STOP sign)</b>	<b>14</b>	<b>39%</b>	<b>7</b>	<b>19%</b>	<b>16</b>	<b>43%</b>	<b>37</b>
<b>a. Obstructing sidewalk</b>	<b>14</b>	<b>39%</b>	<b>7</b>	<b>19%</b>	<b>16</b>	<b>43%</b>	<b>37</b>
MV	14	39%	7	19%	16	43%	37
NA							
<b>b. Obstructing curb ramps</b>							
MV							
<b>c. Obstructing loading zone</b>							
MV							

**CITY-WIDE ADA NON-COMPLIANCE SUMMARY  
FOR MAJOR ROADWAYS**

Non-Compliance Category	PRINCIPAL ARTERIALS		MINOR ARTERIALS		COLLECTORS		TOTAL VIOLATIONS
<b>7. Street Light Pole (City/PNM Owned)</b>	<b>178</b>	<b>47%</b>	<b>106</b>	<b>28%</b>	<b>81</b>	<b>24%</b>	<b>373</b>
a. Obstructing sidewalk	162	48%	100	29%	78	23%	340
WSN	25	33%	17	23%	33	44%	75
MV							
NA							
MV/NA	137	52%	83	31%	45	17%	265
b. Obstructing curb ramps	6	24%	6	24%	13	52%	25
MV			6	31%	13	69%	19
RC	6	100%					6
c. Obstructing loading zone	8	100%					8
RL	8	100%					8
<b>8. Power Poles (PNM Owned)</b>	<b>19</b>	<b>11%</b>	<b>41</b>	<b>23%</b>	<b>118</b>	<b>85%</b>	<b>178</b>
a. Obstructing sidewalk	19	12%	35	22%	107	67%	161
WSN	12	15%	8	10%	59	74%	79
MV							
NA							
MV/NA	7	9%	27	33%	48	59%	82
b. Obstructing curb ramps			6	40%	9	60%	16
RC			6	40%	9	60%	15
c. Obstructing loading zone							
RL							
<b>9. Sidewalk</b>	<b>570</b>	<b>40%</b>	<b>453</b>	<b>22%</b>	<b>411</b>	<b>29%</b>	<b>1,434</b>
a. Surface	277	48%	184	31%	142	24%	603
MS	277	48%	184	31%	142	24%	603
b. Longitudinal Slope >1:20	14	30%	9	20%	23	50%	46
NA	14	30%	9	20%	23	50%	46
c. Cross Slope >1:50	22	35%	14	21%	29	45%	65
MS	22	40%	5	9%	29	51%	56
d. Width <36"	8	48%	9	52%			17
NA							
WS	8	48%	9	52%			17
e. No sidewalk	244	36%	231	34%	213	31%	688
IS	244	36%	231	34%	213	31%	688
f. Vertical Clearance <80"	4	33%	6	47%	3	20%	13
CUT	4	33%	6	47%	3	20%	13
<b>10. Driveway</b>	<b>4,472</b>	<b>35%</b>	<b>3,558</b>	<b>28%</b>	<b>4,571</b>	<b>36%</b>	<b>12,601</b>
a. Surface	49	34%	85	58%	12	8%	146
MD	49	34%	85	58%	12	8%	146
b. Cross slope of sidewalk >1:50	4,307	36%	3,401	28%	4,462	37%	12,170
MD	4,307	35%	3,401	28%	4,462	37%	12,170
c. Slope of flared side >1:10	116	41%	72	25%	97	34%	285
MD	116	41%	72	25%	97	34%	285

**CITY-WIDE ADA NON-COMPLIANCE SUMMARY  
FOR MAJOR ROADWAYS**

Non-Compliance Issue/ Violation Code	PRINCIPAL ARTERIALS		MINOR ARTERIALS		COLLECTORS		TOTAL VIOLATIONS
<b>11. Bus Stop</b>	<b>376</b>	<b>52%</b>	<b>249</b>	<b>35%</b>	<b>94</b>	<b>13%</b>	<b>719</b>
a. Benches MV	358	52%	233	34%	94	14%	685
b. Covers MV							
c. Loading zone for wheelchair lift MV	18	52%	16	48%			34
	18	52%	16	48%			34
<b>13. Trees &amp; Area around Trees</b>	<b>38</b>	<b>32%</b>	<b>30</b>	<b>26%</b>	<b>49</b>	<b>42%</b>	<b>117</b>
a. Obstructing sidewalk WSN	17	46%	6	17%	13	37%	36
	17	46%	6	17%	13	37%	36
b. Obstructing curb ramps RC			6	32%	13	68%	19
			6	32%	13	68%	19
c. Obstructing loading zone RL	12	100%					12
	12	100%					12
d. Reducing vertical clearance <80" CUT	9	19%	18	36%	23	46%	50
	9	19%	18	36%	23	46%	50
<b>15. Fire Hydrant</b>	<b>22</b>	<b>14%</b>	<b>40</b>	<b>25%</b>	<b>102</b>	<b>62%</b>	<b>164</b>
a. Obstructing sidewalk WSN	20	13%	34	23%	99	65%	153
	5	13%	7	19%	25	69%	37
MV			4	100%			4
NA							
MV/NA	9	8%	28	25%	74	66%	111
b. Obstructing curb ramps RC	2	22%	6	54%	3	24%	11
	2	22%	6	54%	3	24%	11
MV							
c. Obstructing loading zone RL							
<b>16. Storm Drain System</b>			<b>5</b>	<b>100%</b>			<b>5</b>
a. Obstructing sidewalk WSN			3	100%			3
			3	100%			3
NA							
b. Obstructing future curb ramp ICS							
c. Incorrect grating on the sidewalk RG			2	100%			2
			2	100%			2
<b>17. Water System (Pipes, Meters)</b>	<b>2</b>	<b>100%</b>					<b>2</b>
a. Obstructing sidewalk WSN	2	100%					2
	2	100%					2
NA							
b. Obstructing curb ramps RC							
c. Obstructing loading zone RL							

**CITY-WIDE ADA NON-COMPLIANCE SUMMARY  
FOR MAJOR ROADWAYS**

Non-Compliance Issue/ Mitigation Code	PRINCIPAL ARTERIALS	MINOR ARTERIALS	%	COLLECTORS	%	TOTAL VIOLATIONS
<b>22. Commercial Signs</b>		3	100%			3
a. Obstructing sidewalk MV		3	100%			3
b. Obstructing curb ramps MV		3	100%			3
c. Obstructing loading zone MV						
d. Reducing vertical clearance <30" MV						
<b>23. Private Encroachment</b>	12	100%				12
a. Steps to the property MV NA						
b. Public Phone MV						
c. Parking lot barriers MV	12	100%				12
	12	100%				12
<b>24. Obstruction of Handicap Parking</b>	4	45%	4	55%		8
a. Obstructing loading zone MV	4	45%	4	55%		8
	4	45%	4	55%		8
<b>25. Others</b>		9	15%	52	85%	61
a. Others NA		9	15%	52	85%	61
		9	15%	52	85%	61
<b>TOTALS</b>	<b>10,102</b>	<b>6,882</b>		<b>8,783</b>		<b>25,767</b>



## ***APPENDIX C***

### ***Summary of Mitigation Measures and Cost Estimates to Correct Deficiencies on Major Roadways***

**MITIGATION MEASURES AND UNIT COSTS**

MITIGATION MEASURES	CODE	AVERAGE UNIT COST <sup>1</sup>
Widen Sidewalk to By-pass Obstruction	WSN	\$100
Widen Sidewalk to Increase Width > 36"	WS	\$1,200
Improve Sidewalk Surface	MS	\$300
Install New Sidewalk	IS	\$12 per lin. ft.
Improve Sidewalk Cross Slope	MS	\$800
Modify Driveway Surface	MD	\$800
Modify Driveway Flared Slopes	MD	\$500
Modify Driveway Cross Slope	MD	\$2,100
Install Curb Ramp	IC	\$800
Modify Existing Curb Ramp	MC	\$800
Relocate Curb Ramp	RC	\$1,400
Relocate HC Loading Zone	RL	\$600
Move Traffic Signal Pole	MV	\$1,900
Move Traffic Signal Controller Cabinet	MV	\$1,800
Move Basic Street Sign	MV	\$100
Move Street Light Pole	MV	\$1,200
Move Power Pole	MV	\$5,000
Move Fire Hydrant	MV	\$1,200
Move/Cut Tree	MV	\$300
Move Miscellaneous Object	MV	\$100
Trim Tree	CUT	\$100
Modify Catch Basin to Provide Ramp	ICS	\$3,700
New Storm Water Grate	RG	\$600

Total cost estimates were based on the above average unit costs increased by 30 percent to account for design, inspection and other contingencies.

A minimum easement cost of \$250 was assumed for locations where additional right-of-way may be required.

1. Average unit costs assume construction is performed for large areas rather than as independent, site-specific projects.

**COST ESTIMATE TO CORRECT DEFICIENCIES (CITY-WIDE FOR MAJOR ROADWAYS)**

Non-Compliance Issue/ Mitigation Code	PRINCIPAL ARTERIALS		MINOR ARTERIALS		COLLECTORS		TOTAL COST
		%		%		%	
<b>1. Traffic Signal Pole</b>	24,700	23%	18,800	18%	59,400	89%	102,700
a. Obstructing sidewalk	13,500	22%	6,000	10%	41,200	68%	60,700
WSN	4,000	71%	300	5%	1,300	23%	5,600
MV							
NA							
MV/NA	9,500	17%	5,700	10%	39,900	72%	55,100
b. Obstructing curb ramps	11,200	27%	12,600	30%	18,200	43%	42,000
RC	11,200	27%	12,600	30%	18,200	43%	42,000
<b>2. Traffic Signal Controller Cabinet</b>	700	11%			5,400	89%	6,100
a. Obstructing sidewalk	700	11%			5,400	89%	6,100
WSN	700	100%					700
MV							
NA							
MV/NA							
b. Obstructing curb ramps					5,400	100%	5,400
RC							
MV							
NA							
MV/NA							
c. Obstructing loading zone							
RL							
<b>3. Signalized Intersection Islands</b>	88,800	57%	28,800	43%			68,800
a. No curb ramp	18,400	51%	17,600	49%			36,000
IC	18,400	51%	17,600	49%			36,000
b. Curb ramp not aligned with crosswalk	15,400	65%	8,400	35%			23,800
RC	15,400	65%	8,400	35%			23,800
<b>4. Signalized Intersection Crosswalks</b>	761,800	58%	208,600	16%	354,200	27%	1,324,400
a. Curb ramp not aligned with crosswalk	761,800	58%	208,600	16%	354,200	27%	1,324,400
RC	761,800	58%	208,600	16%	354,200	27%	1,324,400
<b>5. Curb Ramp (City Street/Private Dr./Wy.)</b>	2,998,400	42%	1,780,400	24%	2,381,600	33%	7,110,400
a. Surface	12,800	64%	7,200	36%			20,000
MC	12,800	64%	7,200	36%			20,000
b. Slope of ramp >1:12 or flare side >1:10	1,728,000	45%	998,400	26%	1,122,400	28%	3,848,800
MC	1,728,000	45%	998,400	26%	1,122,400	29%	3,848,800
c. Width of ramp <36"	4,800	100%					4,800
MC	4,800	100%					4,800
d. No ramp	1,252,800	39%	724,800	22%	1,259,200	39%	3,236,800
IC	1,252,800	39%	724,800	22%	1,259,200	39%	3,236,800
e. Slope of Adjacent road surface >1:20							
NA							
g. Width of adjacent sidewalk <48"							
RC							
MC							
WSN							

**COST ESTIMATE TO CORRECT DEFICIENCIES (CITY-WIDE FOR MAJOR ROADWAYS)**

Non-Compliance Issue/ Mitigation Code	PRINCIPAL ARTERIALS	%	MINOR ARTERIALS	%	COLLECTORS	%	TOTAL COST
<b>6. Traffic Sign Pole (i.e. STOP sign)</b>	<b>1,500</b>	<b>39%</b>	<b>700</b>	<b>18%</b>	<b>1,600</b>	<b>42%</b>	<b>3,800</b>
a. Obstructing sidewalk	1,500	39%	700	18%	1,600	42%	3,800
MV	1,500	39%	700	18%	1,600	42%	3,800
NA							
b. Obstructing curb ramps							
MV							
c. Obstructing loading zone							
MV							
<b>7. Street Light Pole (City/PNM Owned)</b>	<b>182,500</b>	<b>50%</b>	<b>108,100</b>	<b>28%</b>	<b>72,900</b>	<b>20%</b>	<b>363,500</b>
a. Obstructing sidewalk	169,300	52%	98,900	30%	57,300	18%	325,500
WSN	2,500	33%	1,700	23%	3,300	44%	7,500
MV							
NA							
MV/NA	166,800	52%	97,200	31%	54,000	17%	318,000
b. Obstructing curb ramps	8,400	27%	7,200	23%	15,600	50%	31,200
MV			7,200	32%	15,600	68%	22,800
RC	8,400	100%					8,400
c. Obstructing loading zone	4,800	100%					4,800
RL	4,800	100%					4,800
<b>8. Power Poles (PNM Owned)</b>	<b>38,200</b>	<b>9%</b>	<b>144,700</b>	<b>32%</b>	<b>293,900</b>	<b>80%</b>	<b>476,800</b>
a. Obstructing sidewalk	38,200	9%	135,700	32%	250,900	59%	424,800
WSN	1,200	15%	700	9%	5,900	76%	7,800
MV							
NA							
MV/NA	35,000	8%	135,000	33%	245,000	59%	415,000
b. Obstructing curb ramps			8,400	38%	14,000	83%	22,400
RC			8,400	38%	14,000	83%	22,400
c. Obstructing loading zone							
RL							
<b>9. Sidewalk</b>	<b>2,487,500</b>	<b>32%</b>	<b>2,795,900</b>	<b>38%</b>	<b>2,958,900</b>	<b>35%</b>	<b>8,242,300</b>
a. Surface	82,800	46%	54,900	30%	42,900	24%	180,600
MS	82,800	46%	54,900	30%	42,900	24%	180,600
b. Longitudinal Slope >1:20							
NA							
c. Cross Slope >1:50	17,600	39%	4,000	9%	23,200	52%	44,800
MS	17,600	39%	4,000	9%	23,200	52%	44,800
d. Width <36"	10,800	50%	10,800	50%			21,600
NA							
WS	10,800	50%	10,800	50%			21,600
e. No sidewalk	2,555,900	31%	2,725,600	33%	2,892,400	35%	8,173,900
IS	2,555,900	31%	2,725,600	33%	2,892,400	35%	8,173,900
f. Vertical Clearance <80"	400	31%	600	46%	300	23%	1,300
CUT	400	31%	600	46%	300	23%	1,300
<b>10. Driveway</b>	<b>9,144,800</b>	<b>35%</b>	<b>7,249,300</b>	<b>28%</b>	<b>9,428,300</b>	<b>27%</b>	<b>25,822,400</b>
a. Surface	40,000	34%	68,000	58%	9,600	8%	117,600
MD	40,000	34%	68,000	58%	9,600	8%	117,600
b. Cross slope of sidewalk >1:50	9,046,800	35%	7,146,300	28%	9,370,200	37%	25,563,300
MD	9,046,800	35%	7,146,300	28%	9,370,200	37%	25,563,300
c. Slope of flared side >1:10	58,000	41%	35,500	25%	48,500	34%	142,000
MD	58,000	41%	35,500	25%	48,500	34%	142,000

**COST ESTIMATE TO CORRECT DEFICIENCIES (CITY-WIDE FOR MAJOR ROADWAYS)**

Non-Compliance Issue/ <i>Mitigation Code</i>	PRINCIPAL ARTERIALS		MINOR ARTERIALS		COLLECTORS		TOTAL COST
		%		%		%	
<b>11. Bus Stop</b>	<b>37,800</b>	<b>52%</b>	<b>23,900</b>	<b>35%</b>	<b>9,300</b>	<b>18%</b>	<b>71,000</b>
a. Benches MV	35,800	52%	23,300	34%	9,300	14%	68,400
b. Covers MV							
c. Loading zone for wheelchair lift MV	1,800	53%	1,600	47%			3,400
	1,800	53%	1,600	47%			3,400
<b>12. Trees &amp; Area around Trees</b>	<b>9,800</b>	<b>23%</b>	<b>10,300</b>	<b>25%</b>	<b>21,500</b>	<b>51%</b>	<b>42,500</b>
a. Obstructing sidewalk WSN	1,700	47%	600	17%	1,300	36%	3,600
	1,700	47%	600	17%	1,300	36%	3,600
b. Obstructing curb ramps RC			8,400	32%	18,200	68%	26,600
			8,400	32%	18,200	68%	26,600
c. Obstructing loading zone RL	7,200	100%					7,200
	7,200	100%					7,200
d. Reducing vertical clearance <80" CUT	1,000	20%	1,800	35%	2,300	45%	5,100
	1,000	20%	1,800	35%	2,300	45%	5,100
<b>15. Fire Hydrant</b>	<b>14,100</b>	<b>9%</b>	<b>47,600</b>	<b>20%</b>	<b>95,600</b>	<b>61%</b>	<b>157,300</b>
a. Obstructing sidewalk WSN	11,300	8%	39,100	28%	91,400	64%	141,800
MV	500	13%	700	18%	2,600	68%	3,800
NA			4,800	100%			4,800
MV/NA	10,800	8%	33,600	25%	88,800	67%	133,200
b. Obstructing curb ramps RC	2,800	18%	8,400	55%	4,200	27%	15,400
MV	2,800	18%	8,400	55%	4,200	27%	15,400
c. Obstructing loading zone RL							
<b>16. Storm Drain System</b>			<b>1,500</b>	<b>100%</b>			<b>1,500</b>
a. Obstructing sidewalk WSN			300	100%			300
NA			300	100%			300
b. Obstructing future curb ramp ICS							
c. Incorrect grating on the sidewalk RG			1,200	100%			1,200
			1,200	100%			1,200
<b>17. Water System (Pipes, Meters)</b>	<b>200</b>	<b>100%</b>					<b>200</b>
a. Obstructing sidewalk WSN	200	100%					200
NA	200	100%					200
b. Obstructing curb ramps RC							
c. Obstructing loading zone RL							



**COST ESTIMATE TO CORRECT DEFICIENCIES (CITY-WIDE FOR MAJOR ROADWAYS) ,**

Non-Compliance Issue/ <i>Mitigation Code</i>	PRINCIPAL ARTERIALS	%	MINOR ARTERIALS	%	COLLECTORS	%	TOTAL COST
<b>22. Commercial Signs</b>			<b>300</b>	<b>100%</b>			<b>300</b>
a. Obstructing sidewalk <i>MV</i>			300	100%			300
b. Obstructing curb ramps <i>MV</i>			300	100%			300
c. Obstructing loading zone <i>MV</i>							
d. Reducing vertical clearance <80" <i>MV</i>							
<b>23. Private Encroachment</b>	<b>12,000</b>	<b>100%</b>					<b>12,000</b>
a. Steps to the property <i>MV</i> <i>NA</i>							
b. Public Phone <i>MV</i>							
c. Parking lot barriers <i>MV</i>	12,000 12,000	100% 100%					12,000 12,000
<b>24. Obstruction of Handicap Parking</b>	<b>2,400</b>	<b>50%</b>	<b>2,400</b>	<b>50%</b>			<b>4,800</b>
a. Obstructing loading zone <i>MV</i>	2,400 2,400	50% 50%	2,400 2,400	50% 50%			4,800 4,800
<b>TOTALS</b>	<b>\$15,923,100</b>	<b>36%</b>	<b>\$12,387,600</b>	<b>28%</b>	<b>\$15,653,800</b>	<b>38%</b>	<b>\$43,949,500</b>

**APPENDIX D**

***Modifications to City of Albuquerque  
Standard Specifications for Public Works Construction***

**APPENDIX D**  
**MODIFICATIONS TO CITY OF ALBUQUERQUE**  
**STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION**

Following is a list of sections and standard detail drawings contained in the "City of Albuquerque Standard Specifications for Public Works Construction" identified for potential modification to attain ADA compliance in new construction and in projects involving alterations to existing facilities. The list includes the section number or drawing number and a brief description of the aspect of the specification where *potential* modification may be required. Many of the items listed below are obvious, but are included to provide a comprehensive listing.

It is important to note that judgment, both in design and in application, must be used to ensure that facilities are constructed in compliance with the federal ADA requirements. Judgment is needed due to the variability in conditions from site to site.

**SECTION 100 MATERIALS**

- Section 111 Colored Portland Cement Concrete
- 111. Provide specifications regarding use of colored pavement to distinguish public sidewalk curb ramps from the adjacent sidewalk.

**SECTION 300 STREETS AND RELATED WORK**

- Section 340 Portland Cement Concrete curbs, gutters, walks, driveways, alley intersections, slope paving, median paving
- 340.6 State that the slope of the gutter at the base of a curb ramp shall not be greater than 1:20 in the direction of pedestrian travel.
  - 340.8 State that the slope of a drivepad shall not be greater than 1:50 (perpendicular to the direction of pedestrian travel) where a section of the drivepad is contained in the continuous passage route of a pedestrian.

- Section 346 Textured Concrete
- 346.5 Consider prohibiting the use of textured concrete in continuous passage routes, particularly at public sidewalk curb ramps.

- Section 347 Brick Sidewalk
- 347.6 Consider prohibiting the use of brick sidewalk in continuous passage routes.
  - 347.6 Ensure that sidewalk cross-slopes are no greater than 1:50.

- Section 348 Brick Pavement Surface
- 348.6 Consider prohibiting the use of brick in continuous passage routes.

**SECTION 400 TRAFFIC CONTROL**

- Section 420 Traffic Signal and Street Lighting Conduit, Foundations and Pull Boxes
- 420.1 State that all work shall be performed to meet the requirements of the ADA.
  - 420.4.2 State that the pull box shall not vary more than 1/4 inch (6 mm) above or below the adjacent surface when located within a continuous passage route of a pedestrian.

**SECTION 800 WATER TRANSMISSION, COLLECTOR, DISTRIBUTION AND SERVICE LINES**

- Section 801 Installation of Water Transmission, Collector and Distributor Lines
- 801.3.5. State that valve boxes shall not vary more than 1/4 inch (6 mm) above or below the adjacent surface when located within a continuous passage route of a pedestrian.
  - 801.3.8.9. State that fire hydrants shall not be installed in the continuous passage route of a pedestrian.

**SECTION 900 SANITARY AND STORM SEWER FACILITIES**

- Section 915 Storm Sewer Drainage Appurtenances
- 915.4.7 Specify that gratings in public sidewalks shall have spaces no greater than 1/2 inch (13 mm) wide in the direction of pedestrian flow and shall not be located in the continuous passage route of a pedestrian. Ensure that gratings are installed so that the long dimension is placed perpendicular to the dominant travel direction.

**SECTION 1000 LANDSCAPING**

- Section 1015 Trash and Litter Receptacles
- 1015.4 State that trash and litter receptacles shall not be installed in the continuous passage route of a pedestrian.

**SECTION 2200 STANDARD DETAILS FOR DRAINAGE**

- Drawing 2220 Drainage Storm Inlet Albuquerque Grate
- Add another drawing or include notes to state the ADA requirements with respect to spacing of grate openings and the location and position of storm inlet grates to be followed when a grate must be located in the continuous passage route of a pedestrian. Where located in the continuous passage route, the grate spacing of 2 1/16 inches shall be eliminated and replaced with a spacing no greater than 1/2 inch (13 mm).
- Drawing 2221 Drainage Storm Inlet Alternate Grate
- Provide a note to prohibit the use of this grate where a storm inlet lies in the continuous passage route of a pedestrian.
- Drawing 2236 Drainage Sidewalk Culvert with Steel Plate Top
- Indicate in the drawing that the culvert top plate shall not vary more than 1/4 inch (6 mm) above or below the sidewalk surface when located within a continuous passage route of a pedestrian.
- Drawing 2250 Drainage Stationary and Removable Post Details
- Indicate in the drawing that posts shall not be located in the continuous passage route of a pedestrian.

## **SECTION 2300 STANDARD DETAILS FOR WATER**

### **Drawing 2325 Water Valve Box Type "A"**

- Indicate in the drawing that the valve box lid and the finished pavement elevation shall not vary more than 1/4 inch (6 mm) above or below the sidewalk surface when located within a continuous passage route of a pedestrian.

### **Drawing 2326 Water Valve Box Type "B"**

- Indicate in the drawing that the valve box lid assembly shall not vary more than 1/4 inch (6 mm) above or below the sidewalk surface when located within a continuous passage route of a pedestrian.

### **Drawing 2347 Water Details on Typical Fire Hydrant Locations**

- Add to General Note #2 that the 5-foot clearance must provide a stable, firm, slip-resistant surface for pedestrian travel.
- Add a General Note stating that fire hydrants shall not be located within a public sidewalk curb ramp or other ramp provided in the continuous passage route of a pedestrian.

### **Drawing 2360 Water Meter Box Location**

- Add a General Note stating that the water meter box assembly shall not vary more than 1/4 inch (6 mm) above or below the adjacent surface when located in the continuous passage route of a pedestrian.

### **Drawing 2361 Water Typical Meter Box Installations**

- For Construction Note D, state that the meter box cover assembly shall not vary more than 1/4 inch (6 mm) above or below the adjacent surface when located in the continuous passage route of a pedestrian.

### **Drawing 2362 Water Metered Service Line Installation**

- For Construction Note C, state that the meter box cover assembly shall not vary more than 1/4 inch (6 mm) above or below the adjacent surface when located in the continuous passage route of a pedestrian.

### **Drawing 2363 Water Metered Service Line Installation**

- For Construction Note D, define "flush" to be no more than 1/4 inch (6 mm) above or below the adjacent surface when located in the continuous passage route of a pedestrian.

## **SECTION 2400 STANDARD DETAILS FOR PAVING**

### **Drawing 2418 Paving Mountable to Standard Curb Transition**

- Replace this drawing and Drawings 2440 and 2441 with three drawings illustrating ADA compliant designs for perpendicular, parallel and diagonal curb ramps. Specify running and cross slopes in terms of ratios rather than percentages. Provide independent drawings so that the designs are clearly depicted and can be applied as site conditions dictate.



**Drawing 2425 Paving Drivepads**

- Under Construction Notes, flared side slopes shall be defined by note E not to exceed 1:10. Running slopes shall be defined by note Q not to exceed 1:12. Cross slopes shall be defined by note K not to exceed 1:50.

**Drawing 2426 Paving Private Entrance Details - Illustrating Two Separate R/W Conditions**

- Revise Construction Note B as appropriate depending on modifications made to Drawings 2418, 2440, and 2441.

**Drawing 2427 Paving Drivepad Modifications**

- Add a drawing specifying alternative treatments for modifying drivepads to achieve compliance with ADA specifications, particularly regarding cross slope deficiencies.

**Drawing 2430 Paving Sidewalk Details**

- Add a General Note stating that public sidewalks less than 60 inches (1525 mm) in continuous width shall provide passing space (i.e., 60 inches of width) at reasonable intervals not to exceed 200 feet (61 m). Revise Construction Note K as appropriate depending on modifications made to Drawings 2418, 2440, and 2441.

**Drawing 2440 Paving Curb Access Ramp**

- Replace this drawing and Drawings 2418 and 2441 with three drawings illustrating ADA compliant designs for perpendicular, parallel and diagonal curb ramps. Specify running and cross slopes in terms of ratios rather than percentages. Provide independent drawings so that the designs are clearly depicted and can be applied as site conditions dictate.

**Drawing 2441 Paving (Wheelchair) Curb Access Ramp**

- Replace this drawing and Drawings 2418 and 2440 with three drawings illustrating ADA compliant designs for perpendicular, parallel and diagonal curb ramps. Specify running and cross slopes in terms of ratios rather than percentages. Provide independent drawings so that the designs are clearly depicted and can be applied as site conditions dictate.

**Drawing 2465 Paving Citywide Pavement Cuts for All Utilities**

- Provide a note specifying that pavement patches in the continuous passage route of a pedestrian shall not vary more than 1/4 inch (6 mm) above or below the pavement surface.

**Drawing 2466 Paving Bus Bay**

- Illustrate a public sidewalk curb ramp appropriately located in this drawing, and reference pertinent other drawings that detail the curb ramp.

**SECTION 2500 STANDARD DETAILS FOR TRAFFIC**

**Drawing 2505 Traffic Channelized Right Turn for Intersection with Principal Arterial**

- Illustrate public sidewalk curb ramps in this drawing, and reference pertinent other drawings that detail the curb ramps.

**Drawing 2520 Traffic Electrical Pull Box**

- Add a General Note stating that the traffic electrical pull box assembly shall not vary more than 1/4 inch (6 mm) above or below the adjacent surface when located in the continuous passage route of a pedestrian. In addition, state that pull boxes should not be located within a public sidewalk curb ramp.

**Drawing 2525 Traffic Pedestal Foundations**

- Add a General Note stating that traffic pedestal foundations shall not be located in the continuous passage route of a pedestrian.

**Drawing 2526 Traffic Mast Arm Foundations**

- Add a General Note stating that traffic mast arm foundations shall not be located in the continuous passage route of a pedestrian.

**Drawing 2527 Traffic Controller Foundations**

- Add a General Note stating that traffic controller foundations shall not be located in the continuous passage route of a pedestrian.

**Drawing 2528 Traffic Pole Installation for Parking Meter**

- Add a General Note stating that parking meters on traffic poles shall not be located in the continuous passage route of a pedestrian.

**Drawing 2529 Traffic Bicycle Gateway**

- Modify the design to allow for wheelchair access.

**Drawing 2530 Traffic Street Light Foundation**

- Add a General Note stating that traffic street light foundations shall not be located in the continuous passage route of a pedestrian.

***SECTION 2700 STANDARD DETAILS FOR LANDSCAPING***

**Drawing 2720 Landscape Concrete Walk**

- Include notes to ensure compliance with the ADA specifications.

**Drawing 2721 Landscape Crushed Sand Path with Concrete Mowstrip**

- Provide a note stating that this type of path shall not be utilized where there are no other reasonable access routes for wheel chair travel.

**Drawing 2722 Landscape Asphalt Path with Concrete Mowstrip**

- Include notes to ensure compliance with the ADA specifications.

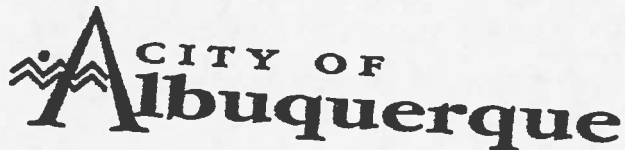
**Drawing 2723 Landscape Bollard Detail**

- Add a General Note stating that bollards shall not be located so that they preclude passage of a wheel chair.

**Drawing 2724 Landscape Bollard Detail in Concrete Walk**

- Add a General Note stating that bollards shall not be located so that they preclude passage of a wheel chair.





Employee Relations Department  
Office of ADA Coordinator  
Inter-Departmental Correspondence

February 12, 1996

To: Robert Gurule, Director, Public Works Department

From: Richard Benison - ADA Coordinator -- 768.3759

Re: Financing Curb Cuts: Who Pays?

---

I read that the U. S. Department of Justice recently issued a Policy Letter concerning the financing of curb cuts. Due to the importance of this issue and in light of the JHK study, I requested a copy of that Letter under the Freedom of Information Act.

I just this afternoon received a response from DOJ. Because of the upcoming meeting and what I anticipate to be a major subject of that meeting, I am hand-carrying it to you for your early review. I have not provided a copy to Legal Department. While Policy Letters are not binding on parties not privy to the original inquiry (if even then), it does predict the Justice Department's position that a municipality must pay for such ADA improvements rather than abutting property owners. I would think that our "Sidewalk, Drive Pad, Curb and Gutter Ordinance" is impacted, as well. The Letter also provides a hint as to the reasoning a Federal District Court might adopt in a future opinion.

Please don't forget to get me a copy of the JHK study and an idea of what your concerns are prior to "the meeting".

cc: Peggy Hardwick  
w/encl



U.S. Department of Justice

Civil Rights Division

1993 FEB 12 PM 2:53

DLP:NDE:AS:  
95-788 (4-501)

Freedom of Information/Privacy Act Branch  
Administrative Management Section  
P.O. Box 65310  
Washington, DC 20035-5310

Mr. Richard Benison  
ADA Coordinator  
Human Resources Department  
Post Office Box 1293  
Albuquerque, NM 87103

Dear Mr. Benison:

This is in response to your Freedom of Information Act request seeking a letter written by James Turner dated March 15, 1994 regarding financing curb ramps. This letter is being provided to you subject to the deletions of names and addresses of individuals pursuant to 5 U.S.C. §552(b)(6), since disclosure thereof would constitute a clearly unwarranted invasion of personal privacy.

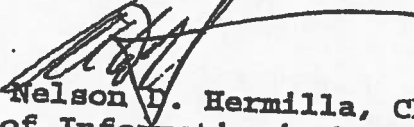
Should you wish to appeal my decision with respect to your request, you may do so by writing, within thirty days, to the Office of Information and Privacy, United States Department of Justice, 10th and Constitution Avenue, N.W., Washington, D.C. 20530. The envelope should be marked "FOI/PA Appeal." Following review by the Department, judicial review of the decision of the Attorney General is available in the United States District Court in the judicial district in which you reside, in which you have your principal place of business, or in the District of Columbia.

I hope the Civil Rights Division has been of some assistance to you in this matter.

Sincerely,

Deval L. Patrick  
Assistant Attorney General  
Civil Rights Division

By:

  
Nelson D. Hermilla, Chief  
Freedom of Information/Privacy Acts Branch  
Civil Rights Division

FILE



Retyped  
2/17/94  
3/8/94  
SBO:AMP:ca  
[REDACTED]

MAR 15 1994

The Honorable Harris Wofford  
United States Senate  
Washington, D.C. 20510-3803

Dear Senator Wofford:

(b)(6) This is in response to your recent letter on behalf of your constituent, [REDACTED] of Richland, Pennsylvania. [REDACTED] has requested your assistance in determining whether or not it is appropriate, under the Americans with Disabilities Act of 1990 (ADA), for Richland to charge him for a ramp that the town is planning to install in front of his house. We apologize for the delay in responding to your letter.

As you know, this Department's title II regulation requires state and local governmental entities with authority over streets, roads, or walkways (including sidewalks) to construct certain curb ramps or similar structures in order to provide access to sidewalks for individuals with mobility impairments. In responding to your inquiry, we have assumed that Richland is installing a curb ramp in front of [REDACTED] home as part of its overall effort to comply with the ADA. If so, the town should be commended for such compliance efforts.

The ADA does not regulate the manner in which a covered entity, such as Richland, should finance changes it must make in order to bring itself into compliance with the ADA. It does, however, prohibit such an entity from placing a surcharge on any particular individual with a disability or group of individuals with disabilities in order to cover the cost of complying with the Act. See section 35.130(b)(8)(f) of the title II regulation (copy enclosed).

Although the ADA does not mandate any particular method of financing required changes, it has generally been assumed that such changes would be financed through the covered entity's general revenues, not by imposing special costs on any individual resident of a town or city. In this instance, however, it appears that [REDACTED] may be being billed for the cost of

(b)(6)

cc: Records CRS Chrono MAF Pecht.congress.93wofford  
McDowney FOIA

the curb ramp under Richland's general system for financing sidewalk improvements. While it is common for municipalities to bill abutting property owners for the cost of sidewalk improvements (typically, based on the cost per linear foot of the improvements abutting the property), these charges are usually allocated to such owners on the theory that their abutting property is benefitted or enhanced by the installation of the improvements. In our view, curb ramps that are installed to meet the town's overall obligations under the ADA do not provide a particular benefit to the adjacent property owner and are more properly paid for through general revenues or other funds available for street and sidewalk improvements.

Again, we must stress that, other than prohibiting a surcharge against a particular individual or group of individuals with disabilities, the ADA and its implementing regulations do not address this issue. Thus, unless a covered entity attempts to place a direct charge on such an individual or group of individuals, the final determination with respect to payment for any improvements undertaken to comply with the ADA falls within the discretion of the taxing entity.

I hope the information provided above will assist you in responding to ~~the above~~ concerns.

(b)(6)

Sincerely,

James P. Turner  
Acting Assistant Attorney General  
Civil Rights Division

Enclosure

HARRIS WOFFORD  
PENNSYLVANIA

ENVIRONMENT AND PUBLIC WORKS  
LABOR AND HUMAN RESOURCES  
FOREIGN RELATIONS  
SMALL BUSINESS

# United States Senate

WASHINGTON, DC 20510-3803

RECEIVED  
DEPARTMENT OF JUSTICE  
December 30, 1993  
JAN -5 P3:41

Assistant Attorney General Sheila F. Anthony  
U.S. Department of Justice  
Department of Congressional Affairs  
Room 1145  
10th and Constitution Avenue NW  
Washington, D.C. 20530

EXECUTIVE SECRETARIA

Dear Ms. Anthony,

I write today regarding the Americans with Disabilities Act.

A curb in front of the house of (b)(6) of Richland, Pennsylvania, is being cut so that the town may build a ramp for the handicapped. Richland proposes to bill (b)(6) directly for the expense of installing this ramp.

Under the Americans with Disabilities Act, should the town of Richland pay for the ramp out of its general revenues, or should the town bill (b)(6) does not use a wheelchair; he does not need the ramp personally. Under the ADA, should he pay directly for the ramp in question, or should the town?

Please advise me of the answer to this question in writing, so that I might reply to (b)(6)

Sincerely,

*Harris Wofford*  
Harris Wofford

(b)(6)

DEPARTMENT OF JUSTICE		RECORDED
43	1-26-94	

CIV. RIGHTS DIV.

## Summary of ADA FIELD SURVEY

- Estimates cost to upgrade arterial and collector streets to ADA standards at \$63,600,000.
- Estimates cost to upgrade residential driveways at over \$100,000,000.
- Estimates 25,750 non-compliant incidents on arterial and collector streets within City (12,601 driveways and 8,902 curb ramps). This equates to 74 incidents per mile.
- Of the 8,902 non-compliant curb ramps, 4190 are where no ramps exist.
- Estimates 1,588 incidents of missing sidewalk.
- Estimates that there are approximately 680 non-compliant street light poles, only 100 of which are owned by the City. The estimated cost to correct PNM street light deficiencies is \$308,000.
- Identifies City Council Districts 2 and 3, at \$14,950,000 and \$8,268,000 respectively, as the two highest cost districts. The two lowest cost districts are City Council Districts 8 and 9, at \$1,612,000 and \$2,274,000 respectively.
- Identifies nine separate "high-use" areas after meeting with disabled community and conducting two public meetings. These areas are: Downtown, Old town, UNM/TVI, Nob Hill, Uptown, State Fair, major hospitals, Roosevelt park, and Tiquex park.
- Due to topography and street grades, it is impossible to bring some areas into compliance.
- It is unknown who is responsible to correct all deficiencies, however City is clearly responsible in many instances, perhaps vast majority of cases.

## Summary of ADA FIELD SURVEY

### This report DOES:

- ◆ document results of a field survey of 72.8 miles of arterial and 9.8 miles of collector roadways for ADA non-compliance,
- ◆ provide a rough cost estimate to completely retrofit arterial and collector roadways for ADA compliance,
- ◆ estimate the lowest cost alternative for providing ADA compliance,
- ◆ identify several high-use areas, and separately analyze survey results for each of these priority areas,
- ◆ estimate cost of getting street lights into compliance with ADA, for both City-owned and PNM-owned lights,
- ◆ breakout ADA non-compliance instances into 25 different potential conflict categories, and totals each category by the number of infractions and the total cost of each type of infraction,
- ◆ provide a cost breakdown of ADA needs by City Council districts.

### This report DOES NOT:

- ◆ analyze City buildings, structures, or programs,
- ◆ provide design details or standards for correcting ADA deficiencies,
- ◆ perform detailed survey or analysis of residential streets,
- ◆ perform a detailed cost estimate of R.O.W. needs to obtain ADA compliance,
- ◆ identify parties financially responsible for all non-compliance violations, and
- ◆ determine if an ADA non-compliance instance was caused before or after passage of the ADA in 1992.