

RESOLUTION 1992 - 160

A RESOLUTION AUTHORIZING THE SUBMISSION TO FTA OF THE
KEY STATIONS PLAN FOR COMPLIANCE WITH REQUIREMENTS OF
THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA)

WHEREAS, the Greater Cleveland Regional Transit Authority is required to meet the requirements of the Americans with Disabilities Act of 1990 (ADA) for accessibility of its light and rapid rail stations on or before July 26, 1993; and

WHEREAS, due to time and budget constraints, GCRTA will be unable to meet the July 26, 1993 deadline for compliance with the requirements of the ADA for its light and rapid rail stations; and

WHEREAS, FTA may grant GCRTA an extension of time for the completion of extraordinarily expensive structural renovations to GCRTA's light and rapid rail stations necessary to meet requirements of the ADA to July 26, 2020, provided that two-thirds of the stations meet the requirements by July 26, 2020, and provided that:

- 1) a plan for compliance is developed by the authority and submitted to the FTA regional office by July 26, 1992, and
- 2) the Authority consults with individuals affected by the plan, holding at least one public hearing on the plan and soliciting comments on it, and
- 3) the plan establish milestones for achieving required accessibility of key stations within the time limits set by the law; and

WHEREAS, GCRTA submitted to FTA a draft version of the Key Stations Plan meeting the requirements stated above on July 26, 1992, with submission of the final version of the plan to be made pending the completion of the public hearing and comment process; and

WHEREAS, the public comment period and public hearings on the Key Stations Plan were completed on August 13, 1992, those hearings resulted in modifications to the draft Key Stations Plan.

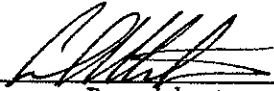
NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the Greater Cleveland Regional Transit Authority:

- Section 1. That the Greater Cleveland Regional Transit Authority hereby adopts the final version of the GCRTA Key Stations Plan for Compliance with Requirements of the Americans with Disabilities Act of 1990 (ADA)

Section 2. That the General Manager be and he is hereby authorized to submit to FTA on behalf of the Authority the Key Stations Plan for Compliance with the Requirements of The Americans with Disabilities Act of 1990 (ADA).

ATTACHMENT: KEY STATIONS PLAN

ADOPTED: September 22, 1992



President

ATTEST: 

Secretary-Treasurer

**Key Stations Plan
For Compliance with Requirements of
The Americans with Disabilities Act of 1990 (ADA)**

Greater Cleveland Regional Transit Authority
Operations Planning Department

September 1, 1992

**Key Stations Plan
For Compliance with Requirements of
The Americans with Disabilities Act**

Executive Summary

Due to time and budget constraints, GCRTA will be unable to meet the July 26, 1993 deadline for compliance with the requirements of the Americans with Disabilities Act of 1990 (ADA) for its key rapid rail stations. To secure an extension, GCRTA must submit a plan for compliance to FTA by July 26, 1992. The plan must identify the key stations and must specify which of the key stations will not meet the deadline for accessibility. Extensions may only be granted for stations which will require "extraordinarily expensive structural changes" to meet accessibility requirements. The plan must document public participation in the planning process including specific consultation with persons with disabilities. The plan must also include milestones for compliance with ADA requirements. If the extension is granted, all key stations must meet ADA requirements before July 26, 2020, with two thirds being accessible before July 26, 2010.

GCRTA considered ADA key stations criteria in identifying key stations in its rapid rail system. GCRTA, as a matter of board policy, will upgrade all 18 heavy rail stations to meet ADA requirements as part of the current Red line rehabilitation program, in which all of the stations will be renovated over the next ten years. In addition, RTA has identified ten key stations on its light rail system which also will be upgraded to meet ADA accessibility requirements. The key light rail stations are: Tower City, Woodhill, East 116, Shaker Square, Lee Road (Green and Blue Lines), Warrensville (Green Line), Green Road, Farnsleigh, and Warrensville-Van Aken.

Currently, none of GCRTA's key stations fully meets ADA key stations requirements. All of the stations that are currently designated to receive upgrades to meet ADA requirements for accessibility will require major, extraordinarily expensive modifications to achieve access. The major barrier to access in the heavy rail (Red Line) key stations is the grade change between the street and the station platform. This barrier will necessitate the installation of elevators or ramps at every one of GCRTA's heavy rail stations. The major obstacle at most light rail (Green and Blue line) stations is the low platform design, which requires that riders climb steps to board the train cars. Overcoming this barrier will require major structural modifications to the station platform, to the light rail cars, or some combination of the two. The decision as to the approach to

achieving light rail accessibility is complicated by unknown factors involving the costs and feasibility of structural changes to the light rail vehicles and other factors

GCRTA currently plans to upgrade its heavy rail stations to meet ADA requirements as part of its rehabilitation program for those stations over the next twelve years. Under this plan, the heavy rail system will be completely accessible before July 26, 2010. GCRTA plans to upgrade its light rail stations in two phases. Phase one, beginning in 1994 and ending on July 26, 2010, will see the completion of required modifications at six of the ten key light rail stations: Tower City, Warrensville-Van Aken, Green Road, Shaker Square, Woodhill, and Lee Road (Blue line). Phase two, from July 26, 2010 to July 26, 2020, will see the completion of required modifications at the remaining four key stations (East 116, Lee Road (Green line), Warrensville (Green line), and Farnsleigh).

Introduction

The Americans with Disabilities Act of 1990 (ADA) requires that key stations and station facilities on public transit light and rapid rail systems be fully accessible to the disabled, including those using wheelchairs, "as soon as practicable, but in no case later than July 26, 1993, unless the transit entity receives an extension."

At this time it is apparent that GCRTA will be unable to meet this deadline for its key stations on the heavy and light rail systems. Therefore, the Authority must request an extension to allow sufficient time to make the stations accessible. FTA may grant an extension of the date by which time the stations must be accessible up to July 26, 2020 if two thirds of the stations are made accessible by July 26, 2010 and if the following conditions are met:

- (1) A plan for compliance is developed by the authority and submitted to the FTA regional office by July 26, 1992;
- (2) The authority consults with individuals with disabilities affected by the plan, holding at least one public hearing on the plan and soliciting comments on it. "The plan submitted to FTA shall document this public participation, including summaries of the consultation with individuals with disabilities and the comments received at the hearing and during the comment period. The plan also shall summarize the public entities responses to the comments and consultation.";
- (3) The plan establish milestones for achieving required accessibility of key stations within the time limits set by the law (two thirds of key stations complete by July 26, 2010, and all key stations complete by July 26, 2020);
- (4) The requirements state that extensions may be granted only for key stations "which need extraordinarily expensive structural changes to, or replacement of, existing facilities (e.g., installations of elevators, raising the entire passenger platform, or alterations of similar magnitude and cost)."

Identification of Key Stations

The first step in developing a plan for meeting ADA requirements is to identify the "key" stations in GCRTA's system. The task of identifying "key" stations is left to the transit authority. However, the ADA requires that transit authorities consider five criteria when identifying "key" stations. Previous GCRTA Board policy has determined that all of the Red line heavy rail system stations will be made accessible to the disabled as part of the rehabilitation program for those stations which has already begun. The five ADA "key stations" criteria and an explanation of how GCRTA applied the criteria to identify key stations on the light rail system are listed below.

(1) Station Volume

The first ADA key station criterion asks that the authority consider as a key station any station "where passenger boardings exceed average station boardings on the rail system by at least 15 percent, unless such a station is close to another accessible station." Volume at GCRTA light rail stations varies widely between stations, ranging from more than 2,500 daily boardings at Tower City and 1,000 daily boardings at Shaker Square to around 100 at several light rail stations. Thus, the concept of "average station passenger boardings" is not particularly useful. For the purpose of identifying key stations, high volume stations on the light rail system are defined as those having, on average, more than 150 boardings per day. This standard is, in fact, lower than the average number of station boardings.

(2) Rail Transfer Station

On GCRTA's rail system, passengers can transfer between the two light rail lines at any station between Tower City and Shaker Square. However, passengers rarely transfer between light rail lines except at Shaker Square, the last transfer point between the two light rail lines, and at Tower City. For the purpose of identifying key stations, only Shaker Square and Tower City are considered transfer stations.

(3) Bus Transfer Station/Major Park-n-Ride Station

The third ADA criterion states that authorities should consider stations that are "major interchange points with other transportation modes, including stations connecting with major parking facilities, bus terminals, inter-city or commuter rail stations, passenger vessel terminals, or airports." As in the case of the first criterion, GCRTA views this criterion inclusively. All stations connecting to one or more bus

routes or having a Park-n-Ride with more than 100 spaces have thus been considered "major transfer points" for the purpose of identifying key light rail stations.

(4) End Station

The ADA criterion asks the authority to consider stations at the end of rapid lines, "unless an end station is close to another accessible station." The end stations on GCRTA's light rail system (Tower City, the Green line end station at Green Road and the Blue line end station at Warrensville-Van Aken) are identified as key stations.

(5) Major Activity Centers

The last criterion asks that the authority consider stations "serving major activity centers, such as employment or government centers, institutions of higher education, hospitals or other health care facilities, or other health care facilities, or other facilities that are major trip generators for individuals with disabilities." GCRTA has designated stations located within a quarter-mile of a major activity center as meeting this criteria.

Most of GCRTA's light rail stations are located in residential areas. The major exceptions are Tower City; East 116th, located near St. Luke's Hospital; Lee Road (Blue line), Farnsleigh, Warrensville-Van Aken, and Shaker Square, located in or near commercial districts. These six stations have been identified as key stations.

The matrix below compares the "key stations" criteria to each of the light rail stations.

**Evaluating Light Rail Station Characteristics
According to ADA "Key Stations" Criteria**

<u>Stations</u>	<u>High Station Volume</u>	<u>Rail Transfer Station</u>	<u>Bus Transfer/ Park-n-Ride Station</u>	<u>End Station</u>	<u>Near Activity Centers</u>
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Blue & Green Line
Stations:

Tower City	X	X	X	X	X
East 34th			X		
East 55th			X		
East 79th			X		
Woodhill	X		X		
East 116th	X		X		X
Shaker Square	X	X	X		X

Blue Line
Stations:

Drexmore					
South Woodland					
Southington					
Onaway					
Ashby					
Lee	X		X		X
Avalon					
Kenmore					
Lynnfield					
Farnsleigh			X		X
Warrensville	X		X	X	X

Green Line
Stations:

Coventry					
Southington					
South Park					
Lee	X		X		
Attleboro					
Eaton					
Courtland					
Warrensville	X		X		
Belvoir					
West Green					
Green	X		X	X	

GCRTA designated stations meeting two or more of the key station criteria as key stations. The following key stations have been identified on the light rail system.

Green and Blue Lines

Tower City
East 93-Woodhill
East 116
Shaker Square

Blue Line

Lee Road
Farnsleigh
Warrensville-Van Aken

Green Line

Lee Road
Warrensville
Green Road

Reasons for Selection of Key Light Rail Stations

As noted above, all of GCRTA's heavy rail Red line stations will be upgraded to meet ADA requirements as part of their current renovation program. Thus, an analysis of key stations for the heavy rail will not be necessary. The key stations on the light rail system were selected for the following reasons.

Green & Blue Line Stations

Tower City: Meets all key station criteria: high station volume; end station; ability to transfer between light and heavy rail and between the two light rail lines; ability to transfer to buses; near major activity centers.

Woodhill: High stations volume (approximately 500 daily boardings) and service by three high-ridership bus routes (10, 11, 13). The small (53 space) Park-n-Ride at Woodhill bridges an excessive distance between the next nearest proposed disabled-access station and Park-n-Ride on the light rail system.

East 116: Proximity to St. Luke's Hospital and other nearby medical facilities; high station volume (more than 400 daily boardings) and a connection to bus route 50.

Shaker Square: High station volume (approximately 1,000 daily boardings); transfer point between Green and Blue lines; connection to four bus routes (12, 13, 48, 48A).

Blue Line Stations

Lee Road: High station volume (approximately 200 boardings per day) and a connection to bus route 40, as well as proximity to activity centers including Shaker Heights Public Library and City Hall and the shopping area several blocks away on Chagrin Boulevard. Also, this station bridges an excessive distance (more than three miles) between proposed disabled access stations at Shaker Square and Farnsleigh.

Farnsleigh: Major Park-n-Ride (146 spaces) and proximity to commercial area at Warrensville-Van Aken.

Warrensville-Van Aken: End station of Blue line; high station volume (approximately 500 daily boardings); connection to 5 bus routes (5, 14, 24, 41, 91); proximity to commercial area at Warrensville-Van Aken-Chagrin Boulevard intersection.

Green Line Stations:

Lee Road: Connection to two bus routes (37, 40), and moderately high station volume (more than 100 daily boardings). This station bridges a distance of more than three miles between proposed disabled access stations at Shaker Square and Warrensville.

Warrensville: Major Park-n-Ride (120 spaces) and connection to bus route 41.

Green Road: Green line end station; major Park-n-Ride (803 spaces, including spaces at West Green); high station volume; connection to bus route 34.

Fulfillment of Public Participation Requirements

GCRTA's efforts to bring the public into the process of meeting ADA accessibility requirements included consultation with disabled members of the community during the drafting of the Key Stations Plan, and offering of the plan for public review and comment upon completion of the draft plan.

Consultation with GCRTA Committee on Disability Issues

Twice during the formulation of the Key Stations Plan, GCRTA staff reported on the progress of the plan to the GCRTA Committee on Disability Issues, a Committee formulated of disabled members of the community, GCRTA staff members, and other interested members of the community. On May 21, 1992 the Manager of Facilities Planning and Project Development reviewed a preliminary draft of the Key Stations Plan and answered questions and received comments from the Committee on rail accessibility issues and GCRTA's plans for meeting the mandates of the ADA. Specific questions included inquiries as to how GCRTA would achieve accessibility of the light rail (Blue and Green Line), to which GCRTA staff responded that the Authority would review various options to achieve accessibility on the system, including car retrofit, ramps or elevators on platforms, or new cars, and make a decision as to which means of achieving accessibility will be employed in 1993.

In response to another question relating to plans to bring about rail accessibility for persons with visual or hearing impairments, involving changes to signage, lighting, calling of stops by the rail operators, and other factors, GCRTA staff responded that plans would be formulated to bring the stations into compliance by Authority Engineers and Planners physically assessing the status of each station with regard to those items relating to the visually and hearing impaired. A visually impaired member of the community attending the meeting noted that he and two other persons representing the Sight Center had met at rail stations with GCRTA Engineering and Construction staff to evaluate platform edging materials for the stations.

GCRTA Engineering and Construction staff described to the Committee other items which would comprise parts of the renovation of the rail stations, including new ADA compliant graphics and wooden strips across glass doors to help the visually impaired, and noted that GCRTA would encourage flooring manufacturers to design and manufacture high quality tactile warning strip material. Plans for the new West Park Rapid Station were also reviewed for the Committee, with an emphasis on ADA

related elements. GCRTA staff also noted a suggestion made by a member of the committee that TDD telephones for hearing and communication-impaired persons be installed at the rapid stations.

At the July 16, 1992 meeting of the Committee, GCRTA Facilities Planning and Engineering and Construction staff reported on the progress of the Key Stations Plan. The findings of a costing study to determine the cost of ADA mandated renovations to the light rail key stations was reviewed for the Committee, noting the specific elements which must be changed or added at the stations to meet ADA accessibility requirements. The selection process by which the Key Stations were selected was reviewed for the committee and the ten stations on the light rail (Blue and Green lines) which were selected as key stations were identified for the Committee, and the Committee was reminded of the plan to renovate all 18 heavy rail (Red line) stations to meet ADA requirements. The Committee was informed that, per an option in FTA regulations, GCRTA is requesting an extension to allow sufficient time to come into compliance with ADA regulations for rail station accessibility, further explaining that if the FTA approves the extension, GCRTA will have until 2020 to meet accessibility requirements, provided two thirds of the stations are completed by 2010.

Key Stations Plan Public Hearings Process

In early July, 1992, upon completion of the draft Key Stations Plan, GCRTA scheduled three public hearings on the Key Stations Plan on August 11, 12, and 13, 1992. Draft copies of the plan were made available upon request from GCRTA's Customer Relations Department as of July 12, 1992. The public hearing dates and locations were publicized in three separate newspapers during the week of July 12 - 18: the Cleveland Plain Dealer on Sunday, July 12; The Call and Post (a local newspaper primarily serving the black community) on Friday, July 16; and the Ohio Boricua (a Spanish-language newspaper) on Friday, July 16. The Key Stations Plan was disseminated in a mass mailing to over 1,400 community contacts. A summary of publicity efforts for the Key Stations Plan public hearings by GCRTA's Community Relations Department and copies of the newspaper advertisements are included in Appendix A.

The three public hearings on the Key Stations Plan were held as planned on August 11, 12, and 13, 1992. The first hearing was held on the evening of August 11 at the Lakewood Health Department in the City of Lakewood, a western inner suburb of Cleveland. The Lakewood meeting was attended by 9 people, 4 of whom commented on the plan. The second hearing was held at GCRTA's offices in Downtown Cleveland at

noon on August 12. 16 persons attended the meeting at GCRTA, with 6 commenting on the plan. Two of the persons attending the Downtown hearing had also attended the Lakewood hearing. On August 13 the third hearing was held at City Hall in Shaker Heights, an east-side inner suburb and the primary destination of the two light rail lines. Two persons attended the Shaker Heights hearing, both of whom commented on the plan.

The three hearings were moderated by the Assistant General Manager for Marketing and Development. At each of the hearings, a brief summary of the Key Stations Plan was presented to those attending, and comments and questions were accepted. Many of the questions asked at the hearing were not directly related to the ADA Key Stations Plan but were more generally related to ADA or the rail system. Most of the questions which were asked directly regarding the Key Stations Plan were to clarify information reported in the plan. In all, twelve persons commented on the plan in person at the hearings, and another commented by telephone to GCRTA staff. A summary of the significant issues raised in the public comment period and GCRTA's response to questions and comments is included in Appendix B.

As a result of comments received at the Shaker Heights public hearing, GCRTA has reversed the phasing of the two stations located on Lee Road in Shaker Heights. In the draft plan, the Lee Road (Green line) Station, located at Lee and Shaker Boulevard, was scheduled for renovation to meet ADA requirements in 2010, while the Lee Road (Blue line) Station at Lee and Van Aken, which will require elevator installation and thus will be more costly to complete, was scheduled for renovation in 2016. A commentor at the Shaker Heights hearing, noting the higher population density and greater number of activity centers at Lee and Van Aken and nearby at Lee and Chagrin, asked that GCRTA renovate the Blue line station at Lee Road before the Green line, which is located in a lower density residential area. After reconsidering the relative merits of the two phasing schemes, GCRTA opted to take the commentor's suggestion and reverse the phasing of the two stations.

Request for Extension of Required Date of Completion of ADA Mandated Improvements to Heavy Rail and Key Light Rail Stations

The improvements necessary for achieving compliance with ADA key station requirements can be divided into two categories. In the category of lower cost improvements are those of relatively minor cost to the authority, items such as improved station signage, platform warning strips, TDD telephones, and other relatively inexpensive additions or changes to station facilities. Higher cost improvements are those requiring major mechanical or structural improvements to station facilities and train cars (e.g. level changing mechanisms including station elevators, ramps, and train car or platform-based wheelchair lifts).

GCRTA's heavy rail and key light rail stations will require a variety of improvements ranging from some of fairly modest cost to some of extraordinary expense to achieve compliance with ADA accessibility requirements. Due to the extraordinarily expensive mechanical and structural changes required to achieve accessibility in accordance with ADA requirements, and due to the limited, insufficient time remaining before the July 26, 1993 deadline, GCRTA is requesting an extension of the deadline for completion of the mandated improvements to its 18 heavy rail stations and ten key light rail stations to July 26, 2020, with the condition that two-thirds of the stations will be completed by July 26, 2010. Timetables, cost projections and milestones for compliance for the upgrading of the stations to meet ADA accessibility requirements are listed below.

Heavy Rail System: Red Line Improvements

Current Status

The heavy rail rapid transit system is a high platform loading mode. Persons confined to wheelchairs or who use other mobility aids do not encounter any changes in elevation when boarding or alighting from high platform vehicles. consequently, the heavy rail system may be considered to be physically accessible to the wheelchair-bound disabled without further modifications in cases where the station is accessible to them.

Currently, GCRTA's heavy rail station at Hopkins Airport and the heavy rail portion of Tower City Center Station are physically accessible to wheelchair and other mobility aids. The new station being constructed at West 25th will also be physically accessible. However, these stations will not fully meet ADA requirements in such areas as signage, lighting, and in some cases, platform edge warning strips. The stations at West

25th and Airport should meet ADA requirements by the time of their completion in 1993, though this may require some additional work that is not currently budgeted. Tower City Station's Red line side will receive its remaining necessary improvements when the light rail side is renovated to meet accessibility requirements in 1995.

All other Red line stations will require major renovations, such as elevators or ramps, to achieve access to the station platform from grade level, in addition to other renovations of relatively minor cost.

Tentative Timetable of Red Line Renovation Completion Dates and Estimated Cost of ADA Mandated Improvements, in Dollars of the Day.

<u>Station</u>	<u>Tentative Renovation Dates</u>	<u>Estimated Cost of ADA Improvements</u>
West 25	1992	\$431,000
Airport	1993	393,000
Superior	1994	547,000
West Park	1994	861,000
Tower City	1995	*411,000
West 98-Detroit	1995	597,000
West 117-Madison	1996	676,000
Windermere	1996	987,000
Brookpark	1997	882,000
Triskett	1998	926,000
University Circle	1998	926,000
West 150-Puritas	1998	926,000
West 65-Madison	1999	712,000
East 55	2000	1,050,000
East 105	2000	748,000
East 34	2001	785,000
East 79	2002	824,000
East 120	2002	824,000

Total cost of ADA mandated improvements to heavy rail stations 1992 - 2002, not including Tower City Station, is \$13,095,000.

* Tower City Center Station is currently physically accessible to wheelchairs on the heavy rail side. Additional improvements to allow the station to fully meet ADA requirements for accessibility, including mini platforms to allow wheelchair access to light rail cars, will cost an estimated \$411,000 in 1995. Costs for Tower City Center Station improvements are not included in the total costs for heavy rail station

Light Rail (Green and Blue Line) Improvements

Disabled access to GCRTA's light rail system breaks down into two separate issues: station access and vehicle access. Some of GCRTA's rapid stations, including some key light rail stations, are currently wheelchair accessible. However, the light rail *trains*, which require walking up steps for boarding, are not accessible. All the key stations on the light rail lines will require some combination of platform and/or train modifications to make the trains accessible to the disabled. These changes might include adding wheelchair lifts to the trains and modifications to train doors to allow those disabled who are able to stand but not to climb stairs (such as those who use walkers or other mobility aids) to use the lift to enter the car. Other possible modifications to bypass the stairs might include placing mini platforms or lifts on the station platform, or some combination of these two modifications.

Those stations listed below as stations where additional modifications are required to allow the disabled access to station platform and facilities are stations where elevators will be required to allow the disabled access to the *station*. These modifications will be in addition to any modifications necessary to make the trains accessible to the disabled and to other relatively lower cost modifications such as signage, lighting, tactile warning strips, etc.

Key Stations that will require modifications to allow disabled access to light rail trains

Tower City
East 93rd-Woodhill
East 116th
Shaker Square
Lee Road (Green and Blue)
Farnsleigh
Warrensville (Green and Blue)
Green Road

Key stations where elevators are necessary to allow disabled access to station platform

East 116th
Lee Road (Blue Line)

Below, each light rail key station is evaluated with regard to the modifications which will be required for the station to achieve accessibility for the disabled. The analysis assumes that the rail cars will not be equipped with lifts to achieve access.

Tower City Center: The station is accessible to the disabled on both the heavy and light rail platforms. Light rail trains, however, are not accessible from Tower City or from any other station. The station

platform will require a mini high platform on each side of the light rail station platforms to permit light rail car access. Red line trains are currently accessible to wheelchairs at Tower City, but signage and lighting modifications, platform edge warning strips, disabled access and TDD telephones, and other modifications still must be completed on the heavy rail side for the station to fully meet ADA requirements for access.

East 93 - Woodhill: The north (westbound) platform is currently accessible through the station parking area. Modifications must be made to the path across the tracks to allow disabled access to the south (eastbound) platform. Signage and minor lighting improvements, improvements to the disabled access path, such as curb cuts and improvements of the friction level of the pavement, as well as platform edge warning strips will be required. Several disabled accessible parking spaces must also be created in the station parking area adjacent to the disabled access path.

East 116th: The station and platforms are below grade level and an elevator will be required to achieve access to the platform. Additional modifications required include signage and lighting changes, improvements to the path crossing the tracks from eastbound to westbound platforms, and paving and disabled access path improvements.

Shaker Square: The station facilities and platforms are at grade and currently physically accessible to wheelchairs. Remaining modifications include improvements to the path crossing the tracks between westbound and eastbound platforms, installation of disabled access telephones and TDD phone, detectable warning strips along platforms, and signage improvements.

Lee Road (Blue Line): The station and platforms are located below road grade level and an elevator will be required to achieve access. The installation of the elevator will be complicated by the present station layout and the narrow right of way between Van Aken Boulevard. Possible lighting improvements, detectable warning strips, improvements to the path between platforms, and signage improvements will also be required.

Lee Road (Green Line): The at-grade platforms will require warning strips, possible lighting improvements and signage improvements. The traffic pattern on Shaker and Lee recommends the placement of a disabled accessible parking space or kiss-n-ride to allow the disabled a safe place to disembark from other motor vehicles to reach the station.

Farnsleigh: The platforms are at grade and physically accessible to wheelchairs. The station will require a disabled access telephone, platform warning strips, improvements to paths crossing the tracks between platforms, possible pavement and curb cut improvements, four disabled parking spaces, and signage and lighting improvements.

Warrensville-Van Aken (Blue Line): The station and platform are accessible via the parking area, sidewalks and bus stops. Four paths crossing between platforms and across tracks to sidewalks must be improved. Disabled access telephones, platform warning strips, and some paving, signage, and lighting modifications will also be required.

Warrensville (Green Line): The station and platforms are accessible through the parking area. Disabled access parking spaces, lighting, signage and pavement modifications, path improvements, and disabled warning strip will be required.

Green Road: The platforms are accessible through the parking areas. Parking lot will require as many as twenty disabled accessible parking spaces on the level of the lot adjacent to the platforms. Lighting, signage and pavement modifications, path improvements, and disabled warning strip will be required.

Plan for Compliance

The task of developing a schedule for compliance with ADA requirements for the light rail stations is complicated by the fact that the means by which the vehicles will be made accessible has not yet been identified. Vehicle access can be achieved in one of two ways: by installing lifts on the vehicles, or by installing a lift or mini high platform on the station platform that will elevate the disabled to the floor level of the light rail vehicles, bypassing the vehicle steps. The cost of installing mini high platforms on the station platforms, which includes extending the station platform to accommodate a ramp, is estimated at about \$240,000 per station for each of the key stations, or a total of \$2.4 million for the ten key stations, in current 1992 dollars. However, if this method is used, modifications must be made to the doors and door openings of the light rail vehicles, which are not tall enough to allow standing disabled persons using a mobility aid other than a wheelchair, such as a walker, to walk upright into the car from a high platform. Breda, the manufacturer of GCRTA's light rail fleet, has not yet released estimates of the cost of these door and door opening modifications, but the modifications could run as high as \$90,000 per car, or more than \$4.3 million for GCRTA's fleet of 48 light rail vehicles.

The alternative, installing lifts on each side of each car, will cost an estimated \$100,000 per light rail vehicle, or \$4.8 million for the fleet of vehicles in current 1992 dollars. This alternative would eliminate the need for mini platforms and would have the effect of making all light rail stations, rather than just the key stations, accessible to wheelchairs. However, GCRTA must thoroughly evaluate these two alternatives before determining which will be used.

In addition, GCRTA's current fleet of light rail vehicles is currently more than mid-way thorough its useful life. The future of this fleet of vehicles, as well as whether the fleet could withstand a major retrofit of wheelchair lifts and door/door opening modifications at this stage in their useful lives, is uncertain

Below is the estimated cost, in estimated dollars of the time of construction, for the ADA mandated improvements to each light rail key station to meet compliance with the requirements of the ADA. GCRTA currently intends to complete the improvements to the light rail stations in two phases. In the first phase, the 6 stations which most closely meet the ADA criteria as key stations will be completed by 2010. In phase II, the additional four key light rail stations, including the station at East 116th which will require an elevator, will be completed between 2010 and 2020, with the entire system achieving compliance by July 26, 2020.

These estimates assume that the mini-high platform alternative will be employed at all the key stations, and the estimates reflect the cost of installation of the mini platforms. In the case of Tower City, the estimate includes improvements to bring the heavy rail side of the station and all station facilities fully into compliance with the requirements of the ADA, in addition to required improvements to make the light rail cars and platform accessible.

In the July 4, 1992 draft version of this plan, the phasing of the two stations at Lee Road was reversed, with the Lee Road (Green Line) station scheduled for renovation completion by 2010, and the Lee Road (Blue Line) station scheduled for completion by 2016. As noted above, the phasing of these stations was reversed due to comments received during the public hearings process. The present plan calls for the completion of the Blue line station by 2010, and for the completion of the Green line station by 2016.

Tentative Timetable of Light Rail Renovation Completion Dates and Estimated Cost of ADA Mandated Improvements to Key Light Rail Stations, in Dollars of the Day.

<u>Station</u>	<u>Tentative Renovation Dates</u>	<u>Estimated Cost of Mandated Improvements</u>
Tower City Center	1995	\$411,000
Warrensville-Van Aken	1998	753,000
Green Road	2001	678,000
Shaker Square	2004	781,000
Woodhill	2007	910,000
Lee Road (Blue)	2010	1,390,000
East 116	2012	1,884,000
Lee Road (Green)	2016	1,244,000
Warrensville (Green)	2018	1,529,000
Farnsleigh	2020	1,873,000

Estimated total cost of light rail renovations 1994 - 2020: \$11,453,000

Milestones for Compliance

July 26, 1992

- * Rehabilitation of stations on GCRTA's heavy rail system currently under way.

July 26, 1995

- * Phase I of light rail key stations upgrades has begun with required upgrades at Tower City Station.

July 26, 2010

- * Rehabilitation of heavy rail stations complete. 18 heavy rail stations (GCRTA's entire heavy rail system) meets ADA requirements for accessibility.
- * Phase I of light rail upgrade plan (upgrade of first six light rail key stations) is complete. Key stations at Tower City, Warrensville-Van Aken, Green Road, Shaker Square, Woodhill, and Lee Road (Blue line) meet ADA requirements.

July 26, 2020

- * Phase II of light rail key station upgrade plan (upgrade of remaining four light rail key stations) is complete. Key stations at East 116, Lee Road (Green line), Warrensville (Green line) and Farnsleigh meet ADA requirements.
- * GCRTA's heavy rail and key light rail stations fully meet ADA requirements.

Appendix A: Community Relations Publicity Efforts for ADA Key Stations Plan and Public Hearings.

Community Relations Publicity Efforts

Legal notices for public hearings were placed in three newspapers:

The Plain Dealer - 7/12/92

The Call and Post - 7/16/92

Ohio Boricua - 7/16/92

Mailing of informational flyer to more than 1400 community contacts, including:

Members of the various RTA Advisory Committees

Mayors, City Managers, and Council Members of Local Municipalities

County Elected Officials

Community Organizations

Social Service Agencies

Health Care Providers

Disability Organizations

Senior Citizen Organizations

THE PLAIN DEALER, JULY 12, 1992 - PAGE 5-B

THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY (GCRTA) TO HOLD THREE PUBLIC HEARINGS TO DESCRIBE, AND RECEIVE PUBLIC INPUT ON, THE KEY STATION ACCESSIBILITY PLAN TO MAKE RAPID STATIONS USEABLE BY INDIVIDUALS WITH DISABILITIES, INCLUDING THOSE WHO USE WHEELCHAIRS.

Please take note that in accordance with the Americans With Disabilities Act of 1990, the GCRTA will conduct public hearings on the following dates and times to solicit comments from affected citizens, private transportation providers, the general public, and interested parties on the Key Station Accessibility Plan.

1. Tuesday, August 11, 1992 - 7:00-9:00 p.m.

Lakewood Health Department
14400 Detroit Ave.

Lakewood, Ohio 44107

2. Wednesday, August 12, 1992 - 12:00-2:00 p.m.

RTA Main Office - eleventh floor boardroom

Frank J. Lausche State Office Building

615 Superior Avenue N.W.

Cleveland, Ohio 44113

3. Thursday, August 13, 1992 - 7:00-9:00 p.m.

Shaker Heights City Hall

3400 Lee Rd.

Shaker Heights, Ohio 44120

The Key Station Accessibility plan, in both standard and accessible formats is available for public inspection at the GCRTA in the Community Relations Office, 615 Superior Ave., N.W., 11th floor, Cleveland, Ohio 44113; and may be reviewed during regular business hours.

Comments and/or recommendations pertaining to the plan must include the name of the individual(s), the nature of the comments and/or recommendations, and the basis for these. Comments shall be mailed or delivered to the GCRTA, Director of Customer Relations, 615 Superior Ave., N.W., Cleveland, Ohio 44113, no later than August 27, 1992, at 5:00 p.m., to be included as part of the official record.

The GCRTA will respond to comments and/or recommendations within 30 days of receipt.

RONALD J. TOBER
General Manager/
Secretary-Treasurer

p.d., July 12, 1992

#113362

LEGAL NOTICE

The Greater Cleveland Regional Transit Authority (GCRTA) is holding three public hearings to describe and receive public input on the key station accessibility plan to make rapid stations usable by individuals with disabilities, including those who use wheelchairs.

Pursuant to the Americans with Disabilities Act of 1990, the GCRTA will conduct public hearings on the following dates and times to solicit comments from affected citizens, private transportation providers, the general public, and interested parties on the Key Station Accessibility Plan.

1. Tuesday August 11, 1992 - 7:00 - 9:00 p.m.
Lakewood Police Department
14400 Dorset Ave.
Lakewood, Ohio 44107

2. Wednesday August 12, 1992 - 12:00 - 2:00 p.m.
GCRTA Main Office - eleventh floor boardroom
Frank J. Lausche State Office Building
615 Superior Avenue N.W.
Cleveland, Ohio 44113

3. Thursday August 13, 1992 - 7:00 - 9:00 p.m.
Shaker Heights City Hall
6400 Lee Rd.
Shaker Heights, Ohio 44120

The Key Station Accessibility Plan, in both standard and accessible formats is available for public inspection at the GCRTA in the Community Relations Office, 615 Superior Ave., N.W., 11th floor, Cleveland, Ohio 44113; and may be reviewed during regular business hours.

Comments and/or recommendations pertaining to the plan must include the name of the individual(s), the nature of the comments and/or recommendations, and the basis for these. Comments shall be mailed or delivered to the GCRTA, Director of Customer Relations, 615 Superior Ave., N.W., Cleveland, Ohio 44113 no later than August 27, 1992, at 5:00 p.m., to be included as part of the official record.

The GCRTA will respond to comments and/or recommendations within 30 days of receipt.

RONALD J. TOBER
General Manager/
Secretary-Treasurer

CLP 7/14/92

GRAND CLEVELAND OHIO

EL QUE INFORMA LO QUE OTROS CALLAN

ANO 2-#9

16 DE JULIO DE 1992

ANUNCIO LEGAL

RESOLUTIONS
11845

LA AUTORIDAD DE TRANSITO REGIONAL DE LA GRAN CLEVELAND (GCRTA) LLEVARA A CABO TRES VISTAS PUBLICAS PARA DESCRIBIR Y RECIBIR PUNTOS DE VISTA DEL PUBLICO EN EL PLAN DE ACCESIBILIDAD PARA HACER LA ESTACION DE SERVICIO RAPIDO USABLE POR INDIVIDUOS CON INCAPACIDADES, INCLUYENDO A AQUELLOS QUE USAN SILLAS DE RUEDAS.

Por favor tome nota que de acuerdo con el Acta de 1990 para Americanos con Incapacidades, la GCRTA estará conduciendo vistas públicas en las siguientes fechas y horas para solicitar comentarios de ciudadanos afectados, proveedores de transportación privada, el público en general y grupos interesados en el Plan Clave de Accesibilidad de la Estación.

1. Martes 11 de Agosto de 1992 - 7:00 a 9:00 p.m.
Lakewood Health Department
14400 Detroit Ave.
Cleveland, Ohio 44107
2. Miércoles 12 de Agosto de 1992 - 12:00 a 2:00 p.m.
RTA Main Office - en el cuarto de la junta - piso 11
Frank J. Lausche State Office Building
615 Superior Ave.
Cleveland, Ohio 44113
3. Jueves 13 de Agosto de 1992 - 7:00 a 9:00 p.m.
Shaker Hights City Hall
3400 Lee Rd.
Shaker Heights, Ohio 44120

El Plan Clave de Accesibilidad de la Estación, con formatos rutinarios y accesibles está disponible para la inspección del público en la GCRTA, Oficina del Departamento de Relaciones Comunitarias, 615 Superior Ave. N.W., piso 11, Cleveland, Ohio 44113 y pueden ser revisadas durante horas laborables.

Comentarios y/o sugerencias pertinentes al plan deben incluir los nombres del/los individuos, la naturaleza de los comentarios y/o recomendaciones y las bases para éstas. Los comentarios deben ser enviados o traídos a la GCRTA, Director de Relaciones del Consumidor, 615 Superior Ave. N. W., Cleveland, Ohio 44113 no más tarde de agosto 27 de 1992, a las 5:00 p.m., para que sean incluidas como parte del archivo oficial.

La GCRTA responderá a los comentarios y/o recomendaciones dentro de un período de tiempo de 30 días de haberlas recibido.

RONALD J. TOBER
General Manager / Secretary - Treasurer

Appendix B: Summary of Public Comments During ADA Key Stations Plan Public Comment Period and GCRTA Responses.

ISSUES RAISED	RESPONSE
<u>TIMEFRAMES</u>	
Will there be any disruptions of rail service during renovations?	Minor disruptions may occur.
When will Cedar/University and Windermere Stations be accessible?	Windermere completed - 1996. Cedar/Univerisity completed - 1998.
Reallocate accessible bus service along heavy rail routes.	Vehicle deployment reviews will consider this.
Complete Lee/Van Aken Station before Lee/Shaker Station.	This can be done, and will be researched.
<u>COORDINATION ISSUES</u>	
Work with local municipalities for street and sidewalk improvements.	Comment noted.
Work with the Access Network for better use of 16B2 vehicles.	This is being done.
<u>COST RELATED ISSUES</u>	
What will total renovations cost?	The total cost for heavy rail ADA improvements will be \$13,095,000 and for light rail \$11,453,000.
Cost of renovating the Cedar/University Station will be enormous.	Costs are estimated as \$926,000.
<u>STATION CHOICES</u>	
East Side Red Line stations, to be relocated by potential Dual Hub, should not be included.	Comment noted.

Why aren't West Side stations included?

They are included in the Red Line rehabilitation plans, and will be done over the next ten years.

TECHNICAL ISSUES

Should use a "high block" for rail car access on light rail cars.

Comment noted.

Breda cars should be modified to run on heavy rail.

Comment noted.

Do not purchase low floor cars.

Comment noted.

Company wants to do modification work.

Offer noted.

How will grade stations on the light rail be handled due to rail car design problems; and GCRTA prior agreement with the City of Shaker Heights?

Have not yet made decision on whether to rehabilitate cars; at this point solely rail station accessibility is being discussed. Future agreements with Shaker Heights are not known.

Why aren't rail cars modified prior to station renovation?

Required to do both.

SPECIFIC DISABILITY RELATED ISSUES

T.D.D.s should be installed at stations now.

Required service will be provided, possibly more.

What will be done for visually and hearing impaired persons?

For visually impaired: signage, audio warning signal, tactile warning strip at platform edge; for hearing impaired: TDD availability.

CRTA PROPOSED WHEELCHAIR ACCESSIBLE RAPID TRANSIT STATIONS

 Proposed Wheelchair Accessible Station

* Blue & Green Line will NOT be accessible at these stations

