



CHAPTER IX

Criteria Methodology

Chapter IX presents the criteria and the methodology that were utilized in the scoring and ranking process for the Clifton Pedestrian Circulation Study. Chapter IX also reviews the determination of the criteria and provides details on the results of the pedestrian projects' scoring and ranking process.

PEDESTRIAN WAY CRITERIA

The LSC Team and Clifton Steering Committee selected the criteria that were used in the scoring and ranking of the transportation projects. Based upon the Steering Committee recommendations, several of the criteria were changed to reflect local goals for projects. The following criteria were used in the ranking process:

- Connection to Schools
- Network Connectivity
- Connection to Parks/Recreation
- Connection to Existing Bus Stop
- Connection to Commercial Areas
- Within City/County Right-of-Way (ROW)
- Public Comment
- Planned Improvements
- Consistent with Clifton Transportation Study Recommendations

The more important a criterion was considered to be, the greater the spread of the score. Once all criteria were scored, an Index Score was calculated. This Index Score is the summation of all weighted scores. Table IX-1 provides the initial weighting for the criteria listed above. As shown, most criteria were scored from one point to three points. However, several criteria resulted in a scoring of zero to one. For example, if a facility improvement was within the county/city-owned right-of-way (ROW), it would receive a score of one, whereas if a facility improvement was not within the ROW, it received a score of zero. The determination of the weights assigned to each criteria was based on the comments received from the Steering Committee. The higher the weight, the greater importance the criteria

Criteria Methodology

represents in the overall improvement plan. For example, the “Connection to Schools” rating is something viewed as being very important. This received the highest weighting due to its relative importance in the community. These weights were presented and discussed by the Steering Committee and LSC to determine if accurate weights were assigned. However, by utilizing this methodology, the criteria that are deemed of greater importance for a project will receive a greater score, and therefore, yield a higher ranking among the other projects. Additionally, the Steering Committee provided insight into the overall project scores. The Steering Committee was given the chance to increase the score of a project based upon local goals.

Table IX-1 Criteria and Associated Ratings and Weights			
Rating Criteria	Rating	Weights	Possible Points
Connection to Schools	(1-3)	50	150
Network Connectivity	(1-3)	20	60
Connection to Parks/Recreation	(1-3)	40	120
Connection to Existing Bus Stop	(1-3)	40	120
Connection to Commercial Areas	(1-3)	40	120
Within City/County ROW	(1-2)	10	10
Public Comment	(0-1)	25	25
Planned Improvements	(0-1)	50	50
Consistent with Clifton Transportation Plan Recommendations	(1-3)	40	120
Total			775

Connection to School

The connection to schools was one of the more important elements of the ranking and selection process. As part of the Clifton Transportation Study, it was deemed appropriate to plan for sidewalks on all major roads within one-half mile of each of the schools within the area. If a school was within one-half mile of areas with deficient sidewalks, these improvements received a score of three points. If an improvement was within the one-half mile buffer, and there was an existing sidewalk on at least one portion of the major roads leading to the school, the improvement received a score of two. If an improvement fell outside the one-half mile buffer of the school, the improvement received a score of one. The above methodology was used to provide the highest scores to the projects that had the greater benefit to the existing and planned schools.

Network Connectivity

This criterion involved looking at the length of segments and whether the improvement connected to existing facilities. Shorter segments of deficient or missing sidewalks were given a higher score than those segments which were greater than one-quarter mile in length. The reason for this is that the longer segments may require much more construction time and may, in fact, need to be tied to a complete road construction project prior to the pedestrian facilities improvements being made. It may be likely that a short segment of sidewalk facility is more easily constructed and thereby provide connectivity to existing facilities. Many times, short segments are missing which would complete a longer segment of sidewalk.

Connection to Parks and Recreation Facilities

Connecting residents to parks and other recreation facilities, such as trail networks, is viewed as a high priority in pedestrian planning. Again, similar to the connections to schools, buffers around existing and planned park facilities was used to select projects within certain distances of these facilities. If a park was within one-quarter mile of an existing or planned park facility, it received a score of three. If an improvement provided additional access to a park with an existing sidewalk on an opposing side of street, the improvement received a score of two. If no park was within one-quarter mile or did not provide any direct access to a recreation facility, it received a score of one.

Connection to Existing Bus Stop

Bus stop placement in the Clifton area is approximately one-quarter mile spacing on existing routes. While this spacing may actually be closer than needed, the sidewalks to these existing stops was viewed as vital to getting patrons to and from the stops safely. This was given the second highest weight following the connection to schools criteria. Scoring was based upon whether an improvement provided a direct connection to an existing bus stop (score of three), provided a connection on an opposing side of the street to the bus stop (score of two), or the improvement did not directly improve access to an existing bus stop (score of one).

Connection to Existing Commercial Areas

Connecting residents with existing commercial areas is important not only for the pedestrian, but for the business as well. Commercial areas were taken directly from the Mesa County data indicating whether a property is identified as a commercial area. If an improvement provides a direct connection to an existing commercial property, as taken from the Mesa County Parcels database, this improvement received a score of three. If the improvement was within a reasonable distance—500 feet or less—this improvement received a score of two. An improvement received a score of one if it was not within 500 feet of a commercial property. This criterion was weighted fairly low due the limited amount of information regarding the commercial properties within the area.

Within a City/County Right-of-Way (ROW)

Improvements which can be made within current city/county ROW are viewed as important in the overall screening of improvements. To either purchase property for improvements or seek an easement on a private property are not projects which should receive a high score. Improvements either scored a zero for not being within ROW, or a one for being within ROW; however, the weighting reflects the importance of this criterion, with a weight of 10.

Received Public Comment

After reviewing all planning documents for the area to date, as well as soliciting public comment during the Clifton Open Houses, projects were scored whether they received a specific comment or not. A score of one represents those specific projects or improvements on which the public has commented.

A Planned Improvement

This criterion is based on the fact that some of these improvements are planned activities, whether they are in the CIP or not. For example, the new transfer facility in Clifton is anticipated to have access via a sidewalk. This project obviously has a high ranking due to the fact that it is in the planning stages.

Clifton Transportation Plan Recommended Project

Based upon the specific recommendations as outlined in the Clifton Transportation Study, projects which are likely to occur in the immediate, short-term, or long-term future, are ranked on this timing. For example, the reconstruction of E Road from 2007 to 2009 from 31 Road to 33 Road will greatly affect the pedestrian improvements to that corridor. Projects which are anticipated are ranked higher than those which may not be in the planning horizon.

BIKE AND TRAIL PLANNING

Similar criteria were used to rank bike and trail planning projects. However, the overall important criterion for the Clifton area is safe and usable pedestrian facilities which access schools and recreation facilities. While bike and trail facilities are important, they are not equally important and therefore, bike and trail facilities are secondary to those facilities which provide safe routes to schools for children as well as access to recreation and commercial areas. However, there are several bike and trail facilities which could greatly improve connectivity throughout the area. Ranking of these improvements is very similar to how the pedestrian facilities are ranked.

PRELIMINARY COST ESTIMATING FOR IMPROVEMENTS

There are a limited number of facility improvements which can be considered appropriate in the Clifton area. Table IX-2 provides suitable treatments for both urban and rural cross sections. While Clifton remains an unincorporated area, several approaches may be used when making improvements. However, many times these improvements to existing roadways are not feasible, when a major road construction project is not in the foreseeable future, due to the limits both in funding the project and the actual feasibility of providing those facilities without complete reconstruction of a corridor. While many areas in Clifton are in need of pedestrian improvements, project-specific treatments should be determined based upon factors such as:

- Projected development pattern adjacent to the facility
- Projected roadway development/redevelopment

- Financing and funding strategies
- Development characteristics from residents

Table IX-2 Candidate Pedestrian Treatments	
Roadway	Candidate Treatments
Urban Cross Sections (either curb or curb and gutter)	Concrete sidewalk
	Asphalt Sidewalk
Rural Cross Sections	Concrete sidewalk and curb
	Paved shoulder
	Paved shoulder extension
	Paved gravel extension
	Separated paved sidewalk
	Separated gravel sidewalk

These loosely-defined factors contribute to the type of facility to be incorporated into the area. These “triggers” which ultimately define the timing and the type of improvement which could occur are difficult to determine. If a road corridor is likely to be redeveloped in the next several years, this obviously dictates that some type of pedestrian improvement be made and those costs are associated with that redevelopment. However, if a corridor is not likely to be redeveloped for 15 years, but the pedestrian improvements are warranted to occur prior to that time frame, the associated costs are much higher for those types of improvements. That is the reason behind scoring projects higher which are likely to coincide with a major CIP project. While Table IX-2 provides appropriate candidate treatments for improvements, the preference is that pedestrian ways incorporate both curb and gutter and be separated from traffic for safety reasons. Therefore, the costs associated with pedestrian ways (new sidewalk segments) are based upon the cost of concrete paving, subgrade stabilization, and rolled curb and gutter costs. Costs do not include removal and relocation of utilities, removal of existing barriers or obstacles, fill, as well as additional project-specific elements which cannot be costed until specific engineering for the project has been done. Table IX-3 provides unit cost estimates per linear foot for new facilities. These costs will be discussed by the Steering Committee until consensus on a final cost estimate for improvements can be established.

Table IX-3 Estimated Unit Costs	
Type of Facility ⁽¹⁾	Cost Estimate/Linear Foot
4" Thick Sidewalk	\$27.00
6" Thick Sidewalk	\$34.46
Rolled Curb and Gutter	\$17.00
Granular Stone Pathway	\$12.00
Other Costs	Cost Estimate/Square Yard
Subgrade Stabilization	\$32.00
<i>Paved Shoulder</i>	\$24.39
<i>Paved or Gravel Shoulder Extension</i>	\$15.24
Type of Facility	Unit Cost
Curb Ramp	\$1,000.00
Ladder Crosswalk Stripped	\$300.00
<i>Engineering/Labor Factor</i>	1.2
<i>Notes:</i>	
<i>(1) Mesa County 2004 Construction Bids (Engineering Estimates)</i>	

PRELIMINARY PROJECT PRIORITY

Using the methodologies detailed above to score and rank the pedestrian projects, the LSC team found that the connections to schools, parks, and transit improvements have the highest scores, obviously because they have a greater weighting scheme. Chapter X provides additional detail on the transportation project scoring and ranking.