

Sidewalk Committee Report

June, 2008

Introduction

In July 2007, the Board of Selectman responded to the growing desire for more sidewalks in Acton by creating a Sidewalk Committee. This committee serves as an advisory group to the Board of Selectmen. The Sidewalk Committee was asked to create a set of criteria that could be used to evaluate sidewalk construction projects and then to use that criteria to create a priority list for sidewalk construction projects starting in Fiscal Year 2009 (July 1st, 2008). Sidewalk projects that were scheduled or occurred in Fiscal Year 2008 were not in the scope of the Sidewalk Committee.

Membership applications were solicited via the newspaper, public email lists with wide distribution, and the Acton town website. Members were selected to represent a broad range of ages, backgrounds and familiarity with different areas of town.

The sidewalk committee consists of:

- Paulina Knibbe (co-chair)
- Kate Chung (co-chair)
- Leslie Hogan (vice-chair)
- Sytske Campbell (secretary)
- Bettina Abe
- Richard Calandrella
- Pam Cochrane
- Celia Kent
- Steve Evans (replacing Corrina Roman-Kreuze)

The Sidewalk Committee spent a substantial amount of time developing the Need Criteria (described in detail below) and applying it to over 30 streets. To encourage public participation, the Committee conducted two widely publicized public meetings and maintained a sidewalk-interest email list which was used to announce committee meetings. The committee evaluated the need criteria results and selected a set of 23 streets to evaluate more deeply.

The next step was to evaluate the viability of the projects remaining on the list. The Sidewalk Committee developed the Viability Criteria (described in detail below) and applied the criteria to those projects. Town Engineering staff evaluated each potential sidewalk construction project by doing a rough layout and identifying special issues associated with that project. A rough cost estimate for each

potential project was created. The document with the engineering layouts and cost estimates is attached to this report.

The Sidewalk Committee has gathered all of the hard and soft data that has been accumulated over the last year and discussed the merits of each of these potential projects at length. By consensus, the sidewalk committee recommends that the following six projects be constructed as soon as is reasonably possible. These projects are listed in priority order. We have also listed a secondary pool of projects that have not been prioritized relative to each other but which should be evaluated as the primary list gets completed. We have listed a tertiary pool of projects which are deserving of consideration and which should be further evaluated as the secondary pool is completed.

Criteria

The Sidewalk Committee spent several months developing a broad set of criteria that could be consistently applied across a range of potential projects in town. The criteria was divided into two sections:

1. Need Criteria
2. Viability Criteria

Need Criteria

The Need Criteria were designed to determine which streets in town are the most dangerous for pedestrians. The criteria include a range of attributes that address the nature and speed of traffic, the physical characteristics of the road and the likely number of pedestrians at risk. High scores indicate a high need.

The complete criteria sheet is in the appendix of this document. Components include:

- **Population.** The annual town census was used to determine the adult population (over age 17). The number of children impacted by a specific sidewalk was determined by the number of school bus stops and the number of children using those bus stops. This isn't perfect because it undercounts the children under school age (or in private schools). But it also over counts by including children on nearby streets who use the bus stops on this street. Since the number of children in a given street can vary from year to year, the sidewalk committee felt this was a useful (and consistent) approximation of the number of children in the area.
- **Safety Considerations.** The committee considered the speed of traffic and the geometry of the street (visibility, walking room, etc) in addition to the type of traffic and the type of neighborhood.
- **Connectivity Issues.** The committee analyzed the likelihood of pedestrian use by identifying likely destinations for pedestrians using each potential sidewalk project. Points were awarded for being close to schools and/or the train station. Additional points were awarded for

destinations of interest that were within 1 mile and for filling in gaps between existing sections of sidewalk.

Viability Criteria

The viability criteria were designed to determine how difficult it would be to build a given stretch of sidewalk. High scores indicate an easier sidewalk to build. The following items were evaluated:

- **Neighborhood Support or Opposition.** Neighborhood support or opposition was judged by the existence of sidewalk petitions, the input of residents via email, phone call or attendance at a sidewalk committee meeting or a public input meeting.
- **Financial Considerations.** Sidewalk construction costs vary dramatically. At the request of the sidewalk committee, the Town Engineering Department produced a detailed estimate of the costs for the sidewalks that were determined to have the highest need. The engineering document is attached to this report.
- **Easements.** Most (if not all) of the sidewalk projects that remain to be done in Acton require the granting of an easement by the landowner.
- **Environmental Issues.** Some of the sidewalk projects will require the removal of healthy trees and/or the filling in of wetlands.
- **Scenic / Historic Route Issues.** Roads which are on the town's list of scenic or historic routes have additional procedural issues if / when sidewalks are constructed.

Priority List

1) Central Street (near Mt Hope Cemetery)
2) Lower Prospect
3) Route 2A (Davis Road to Main Street)
4) High Street (#30 - #46)
5) Main Street (Post Office Square to 2A)
6) High Street (#77 to Parker)

1. Central Street – near Mt. Hope Cemetery

Need Analysis

This street received one of the highest ratings on the need criteria sheet (120 points).

There are relatively few people who live on this section of Central Street: 21 adults and 5 children who use 2 bus stops. This is a common walking route for people who live nearby.

This section of Central Street is a very busy connector street with multiple factors increasing the danger for pedestrians, including limited sight distances specifically at the curve at the junction of Summer Street where metal guard rails and steep drop-off on both sides of the road leave virtually no room for a pedestrian to get off the street safely. In addition, it is on a curve, has an intersection with Summer Street which people often come out of at a high speed while looking up Central in the opposite direction (despite the stop sign), and is heavily used by children, teenagers, and adults of all ages who walk, run, and cycle along this stretch.

A sidewalk on this section of Central Street would complete a long stretch of existing sidewalks which connects South Acton and West Acton and would facilitate pedestrian access to the train station, shopping and recreation.

Viability Analysis

This section of Central Street has a viability score of 0. This reflects the fact that it has both positive and negative viability factors.

This section of Central Street is town-like in character and less rural as compared to some other sections of sidewalk. It is not a scenic road as set forth in the town bylaws.

There is strong neighborhood support for this sidewalk. Little is needed in the way of easements. The town has a 10-12 foot right-of-way on the 201 to 156 section of Central and needs just one slope easement from a property owner who has signed the petition for this section of sidewalk.

Constructing a sidewalk here will require the removal of some healthy trees and will require building a retaining wall.

This is one of the more expensive stretches of sidewalk that was evaluated by the committee. The town engineering report indicates that this stretch of sidewalk will cost approximately \$213,820 (\$114.65 per foot). There is some money in the sidewalk fund that is dedicated to either Central or Prospect Street (\$23,825). It may be possible to reduce the cost by using alternate materials for retaining walls. That discussion is out of the scope of this document but should be evaluated further if this sidewalk project is approved.

2. Lower Prospect

Need Analysis

Lower Prospect rated 110 points on the need criteria sheet.

This is a relatively short residential street including many families with children. There are 77 adults living on Prospect (this includes both upper and lower) and 58 children using the bus stops on Lower Prospect.

Lower Prospect is one of the main connections between Central Street and Route 111 for vehicles or pedestrians and is often used as a cut-through by cars and trucks. Its location near the train, schools, conservation land, and shopping areas and the fact that there are few pedestrian connections between Central St. (and roads off Central) and Route 111 make it a well-traveled pedestrian path.

The design of the entrance to the street from Main – which is gently curved rather than at sharp right angles – facilitates truck entrance onto the road and does not force vehicles to slow down significantly, which adds to the safety concerns. There is a fairly steep curve in the road and a hill which also contributes to the safety concerns given traffic speed and imperfect sight lines.

The main reason Lower Prospect did not score as high as Central Street (near Mt. Hope Cemetery), our highest rated street, was that there is generally some room to move off the road out of oncoming traffic, whereas Central at this point has a sharper curve in the road causing worse sight lines just at a place where there is absolutely no room to move out of the way.

Viability Analysis

The viability criteria score was 20 for Prospect Street.

There is strong neighborhood support for this sidewalk.

It appears that there is room to install the sidewalk with minimal disruption of existing trees. The one area that will require more careful design and home owner consultation is the area in front of #34 Prospect where a large tree with a brick protective wall around it is located right at the edge of the road.

Town staff estimate the total cost to be \$85,595 or \$45.27 per foot. The following funds in the sidewalk gift fund may be used for Prospect. Please note that some of these funds may also be used for other sidewalk projects.

Restricted to Prospect Street	\$371.43
Restricted to Prospect or Central	\$23,825.00
Restricted to S. Acton	\$16,844.62

3. Great Road - Route 2A (Davis Road to Main Street (Rt 27))

Needs Analysis

This section of road rated 110 points on the needs criteria sheet due to safety and connectivity issues.

There are several dense residential developments near this stretch of Great Road. The adult population is 280 and the number of students is 61. In addition, there are many apartments and condos on Great Road whose residents are likely to benefit from this sidewalk.

This section of Great Road has no sidewalk on either side but has a growing number of pedestrians who are either non-drivers or do not have access to a vehicle. It is used by people who live in the apartments and condominiums along Great Road to allow them to reach the grocery store (traveling east) and the drug store (traveling west). Cars travel quickly on this major town artery and do not expect to see pedestrians. This section of road has very little room on the side of the road for pedestrians to walk safely.

This section of Great Road starts at the traffic lights at the Route 2A / Route 27 Intersection and connects to the existing sidewalk that begins at Davis Road and stretches most of the way down Great Road toward Concord. There is also a developer commitment to build the sidewalk on the other side of the intersection stretching toward Littleton. Filling in these two pieces will provide almost continuous sidewalk on one side of the street for Great Road.

In addition to providing safer pedestrian access to major shopping destinations, this sidewalk will connect to the baseball diamonds at Veteran's Field. This sidewalk intersects the future route of the Bruce Freeman Rail Trail which will provide a pedestrian path to NARA Park.

Viability Analysis

The Viability score for this section of road is 20.

The proposed section of sidewalk is 1600 feet. This section of Great Rd (on east side) is town land with one privately owned parcel. Because Great Rd is a state road and the likely sidewalk location is within the state Right of Way, the state must give permission to build a sidewalk. This is not expected to cause significant difficulty. There is also a railroad ROW that would need approval, this is where the Bruce Freeman rail trail will be in the future.

There should be no need to remove trees to construct this sidewalk. There are some wetlands which may be impacted by the sidewalk. The design of this sidewalk will need to be worked out with input from the Conservation Department.

Some fill and granite curbing will be necessary.

The preliminary costs shown in the town engineering report are roughly \$67.92 per foot or a total cost of \$108,667.

4. High Street (#30 – #46).

Need Analysis

This section of High Street has a need criteria score of 100 points.

We do not have population statistics for this specific stretch of road but there are 202 adults living on High Street. There are 76 children who use 26 bus stops on High Street.

The proposed sidewalk is approximately 500 feet in length. This stretch of road has a steep grade with little to no access to safety for pedestrians, especially in poor weather. During heavy traffic hours, this point of the street backs up as cars wait to join Route 27, which makes walking more difficult. There is also commercial truck traffic on High Street which increases the danger for pedestrians.

Current development plans in Concord are likely to inject more traffic onto High Street thus making the safety situation more acute.

A local developer is currently installing a sidewalk on High Street which begins at Main Street (Route 27) and will stretch to the Audubon Emergency Access Road. Completing this proposed section of sidewalk will connect that new sidewalk with the existing sidewalk that runs from Faulkner Hill toward Conant. Placing a sidewalk here would provide pedestrian access to the train station and other South Acton destinations for some High Street residents including the Faulkner Hill neighborhood and the Audubon Hill senior community.

Viability Analysis

This section of High Street has a viability score of 10 points.

This section of road is very short but constructing a sidewalk will be technically difficult. Portions of a hill will need to be removed, trees taken down and a retaining wall built.

High Street is listed as a Scenic Road in the Acton Bylaws so the design of the sidewalk will need to be worked out with input from the Historic Commission.

This is the most expensive sidewalk in the proposed list. It is estimated to cost \$184,939 or \$369.88 per foot. There is some money in the sidewalk fund that is restricted to use in South Acton (\$16,844). It may be possible to save some costs by using less expensive construction materials for the retaining wall. That decision is out of the scope of this document but should be considered if this sidewalk is approved.

5. Main Street (Post Office Square to Route 2A)

Need Analysis

This section of Main Street has a need criteria score of 95 points.

The population density on this stretch of road is very low. It is a road that connects high population densities to high value destinations.

The Police Chief has rated this street as the most dangerous street in town for pedestrians. Traffic flows quickly on this major town artery and there are several sections where it is difficult for pedestrians to safely get out of the way of traffic.

This road is the primary route connecting North Acton with the rest of the town. There is currently no pedestrian access for North Acton residents to the center of town. Completing this section of sidewalk will permit pedestrian access for North Acton residents to the Post Office, Town Hall, the Library and other destinations further south. This project will work with the existing sidewalks on Route 2A to enable residents of the many apartments and condos on Route 2A to access the resources at the center of town. From the other side, this sidewalk will provide pedestrian access to the baseball diamonds at Veteran's Field and the shopping at the CVS Plaza. In the future, this stretch of sidewalk will also be a part of the pedestrian connection to NARA Park.

Viability Analysis

The viability criteria score for this road is -10 points.

Town staff ranked this project as the top priority sidewalk in Fiscal Year 2008. The layout was drawn and then re-drawn to provide a more meandering path to accommodate the concerns of opponents of this project. Easements were granted by the landowners to enable the town to make this a more attractive and safer stretch of sidewalk with a buffer between the road and the sidewalk in some spots. However, in April 2008, Town Meeting rejected the easements in a close vote. (A simple majority voted to accept the easements but a 2/3rds vote was required).

This is a relatively easy sidewalk to construct. It will require the removal of a large number of trees. The cost for this project is \$220,000 which is \$52.38 per foot. There is money in the sidewalk gift fund that is dedicated to this project and that will partially defray the cost (\$102,020).

6. High Street (#77 to Parker)

Needs Analysis

The section of high street received a total of 95 points on the need criteria sheet.

We do not have population statistics for this specific stretch of road but there are 202 adults living on High Street. There are 76 children who use 26 bus stops on High Street.

This section of High Street is approximately $\frac{3}{4}$ mile in length. It is marked by a steep incline with several curves in the road that limit sight distance and several stretches with embankments which prohibit pedestrians from moving out of the way of traffic. In addition, High Street is used by many business trucks and other vehicles. A recent traffic study determined 5000 vehicles per day use this street, the majority of which surpassed the speed limit. There are approximately six blind driveways on the North side of High Street around the dangerous curve; adding a sidewalk will create more visibility for cars traveling on High Street and decrease the danger to residents leaving their driveways. A sidewalk on this section of High Street would greatly benefit the many residents in the area who walk to or would like to walk to the Central Street train station, located within a one mile radius of this section's midpoint.

This proposed sidewalk would fill in a gap from an existing sidewalk (#46 to #77 High Street) to Parker Street where the Town is currently installing a sidewalk along High Street that will complete a stretch all the way to Powder Mill Road (Route 62). An additional concern for safety on this street relates to the Town of Concord's recent approval of a 40B development on Old Sudbury Road with potentially more than 300 units. This development will likely cause an increase in traffic on High Street.

Viability Analysis

High Street received 0 points on the viability criteria. This reflects the fact that the viability of sidewalks on this stretch has both negative and positive components.

High Street is a scenic road. Adding sidewalks here is likely to change the character of the road and will be both difficult and expensive. It may be difficult to get easements from landowners for portions of this road due to the need to move stone walls, remove trees, build retaining walls, etc.

The estimated cost for this sidewalk is \$596,159 which is \$184.52 per foot. There is money in the sidewalk fund dedicated to S. Acton which could be used for this project if it has not been used elsewhere (\$16,844.62).

Secondary Pool

This set of sidewalk projects consists of candidates that the Sidewalk Committee felt had significant merit but that did not rise to the level of the sidewalks that were selected in the priority list. As those sidewalks are completed (or if there are reasons they cannot be completed), sidewalks from the secondary pool should be considered. The projects in this pool have not been ranked relative to each other.

Railroad Xings. The railroad crosses town roads at five locations: Parker, Martin, Central (twice), Route 111 and Arlington. The MBTA will not allow sidewalks to cross railroad tracks without the presence of a pedestrian gate that closes when trains are coming. The crossing of Route 111 in West Acton is an example of the type of sidewalk crossing the MBTA wants to see. Installation of these gates is prohibitively expensive. Acton has contacted the MBTA to request the installation of these gates at MBTA expense when improvements are made to the tracks in Acton. The MBTA has agreed to do this for the Central Street railroad crossing near Idlewylde if Acton will cover the cost of materials and the police detail (approximately \$11,000). We are negotiating with them to try for similar agreements for other railroad crossings. However, the MBTA is in serious financial difficulties right now so it is not likely that they will be improving these tracks in the near term future. When they do so, we should be prepared to install the sidewalks crossing the tracks at that time.

Great Road (Acorn Park to Nonset Path (far side by Nagog Woods))
Main Street (2A to Ledge Rock Way)
Martin Street (Central to Railroad X-ing)
Parker Street(High to Drummer)
River Street
Summer Street (Central to Willow)
Summer Street (existing sidewalk to Ethan Allen Drive)
Taylor Road (plus small piece of Minot)
Willow Street(Duggan to Central)

Tertiary Pool

The sidewalk committee investigated many other sidewalks that are worthy of further consideration as the higher priority projects are completed. The projects in this pool have not been ranked relative to each other.

Adams Street

Arlington Street (Rt 2 Bridge to Newtown Road)

Arlington Street (Squirrel Hill to Mass Ave)

Brook Street

Central Street (Nashoba to St. Matthews)

Coughlin Street

Great Road (complete small gaps in sidewalk between Concord town line and Concord Road)

Harris Road

Hosmer Street(Concord Road to Route 2)

Hosmer Street (South of Route 2)

Lawsbrook Road

Liberty Street

Mass Ave (Juniper Ridge to Guggins Brook)

Main Street (Filling in the gaps from Ledge Rock Way to 935 Main)

Martin Street(Jones Field to Stow)

Nagog Hill Road (Main Street to Concord Road)

Nagog Hill Road (Main Street to town line)

Newtown Road to town line

Newtown Road (Simon Willard to Minuteman)

Parker Street (Carlton to Maynard)

Parker Street(Drummer to School)

Piper Road

Powdermill Road (High Street to Maynard town line)

School Street (Hosmer to Lawsbrook)

Lower School Street (near Route 2)

Strawberry Hill Road

Stow Street (Robbins to town line)

Stow Street (Martin to Robbins)

Stow Street (Martin to Maple)

Conclusion

The Acton Sidewalk Committee would like to thank the many citizens who came to our public meetings or provided insightful comments to us in other ways this past year. It is not possible to build all of the desired sidewalk projects at the same time but we need to start somewhere. The Sidewalk Committee is working to facilitate the construction of sidewalks in Acton and has weighed many complicated factors in determining its priority recommendations. We urge Acton residents to support these projects at this time as we strive to make our community a more pedestrian friendly place.