REPORT OF THE SIDEWALK CONSTRUCTION RECOMMENDATION COMMITTEE

1. Our Mission:

The mission of the 2015 Southborough Sidewalk Construction Recommendation Committee is to develop an impartial review and evaluation for identifying streets that have a need for the construction of a new sidewalk. During this process we considered many factors, including but not limited to: Town destinations, ease of construction, environmental impacts, drainage impacts, right-of-way needs, connectivity, etc. More specifically, the Board of Selectmen charged us with the following:

- Review plans of the Town that indicate "through" streets and sidewalk locations;
- Develop a list of walking destinations;
- Create a list of streets where sidewalks would be utilized using the destination list;
- Develop a list of criteria to prioritize the need for sidewalks; and
- Prioritize the list of streets based on the criteria developed so the DPW can work toward funding and constructing the priority sidewalks

The following sections provide more information on **Our Committee**, **Our Process**, and **Our Recommendations**.

2. Our Committee:

The committee was made up of seven members, six were appointed by the Board of Selectmen. The following provides a list of the seven members and their associated committee title.

- Recreation Director (Doreen A. Ferguson, Vice Chair);
- One (1) Public Safety Official (Joseph C. Mauro, Fire Chief) ;
- One (1) member of the Public Works Planning Board (Susan G. Baust, Secretary);
- One (1) member of the Council on Aging (Bill Harrington);
- Two (2) Citizens-At-Large (Matthew J. Chase – Chair; and Robert B. Bezokas);
- One (1) member of the Southborough School System, appointed by the School Superintendent (James Randell, Principal Mary E Finn School); and
- DPW Superintendent (Karen Galligan, Ex-Officio)

This Committee worked closely with the DPW Superintendent during this process to develop a comprehensive document that ranks streets based on ten evaluation criteria. The criteria were developed in a manner to assess priorities that should be considered when

evaluating the need for a new sidewalk. The final product developed was an integrated MS Excel evaluation matrix that assesses each street against the selected criteria. The next section describes **Our Process**.

3. Our Process

The Committee developed an Evaluation Matrix to prioritize projects, or "through" streets that justify the need for a sidewalk today and/ or in the future. The criteria that was developed included ten (10) categories where each category received a ranking score between one (1) and ten (10); therefore, the total score for all categories would not exceed 100. In addition, the functional classification of each street was identified. The functional classifications aided the Committee in determining the streets that likely have the highest traffic demand, pedestrian demand, conflict points, etc. The following provides more details on the terms used in our evaluation matrix. The matrix has been attached to this summary and has been provided in an electronic format (excel) to DPW.

Functional Classification: The functional classification noted in the matrix is defined as: Arterial (A), Collector (C), or Local Roadways/ Streets (L). In general, Arterials typically carry more traffic than a Collector since they connect regional destinations. Collectors typically carry more traffic than a Local Street since they connect local/ Town destinations. Local Streets typically have the greatest number of access points/ driveways and serve residential neighborhoods and connecting to Collectors or Arterials. It is noted that there are always exceptions to this rule where Collectors could carry more traffic than Arterials or Local Streets could carry more traffic than Collectors; etc.

Categories: Each category number 1 through 10 in the matrix was assigned a score between 1 and 10. Each Committee member determined a score and through discussions at several of our meetings, the Committee determined the most appropriate score for each category of each street. The total score would be the sum of all 10 categories for a possible score of 100. This total score was used to prioritize the need for the streets identified in the matrix. It is noted that there is a potential for some streets to have the same score. The following summarizes how the scoring of each category works:

1. Traffic Volumes: Streets that carry more traffic could have more opportunities for pedestrian-vehicle conflicts. The higher the score, the higher the amount of traffic.

2. Pedestrian Activity: Is there known pedestrian activity on the street today, are there pedestrian foot paths along the side of the street, etc.? The higher the score in this category indicates that there is a good amount of pedestrian activity.

3. Safety: Does the street have known safety concerns or has there been a number crashes along the street? Is there limited sight distance (vertical or horizontal curves in the street) or high vehicle-speeds? The higher the score, the more issues known.

4. Available Right-of-Way: Is the right-of-way wide enough to accommodate a sidewalk(s), or will property acquisitions and easements be needed? A higher score in this category indicates that right-of-way is NOT likely needed and sidewalks can be accommodated fairly easily.

5. Connections to Destinations: Does the street lead to/ from destinations in Town, or is the street a designated walkway for Town activities, emergency routes, etc.? A high score in this category indicates connections are of significant importance.

6. Connectivity: Is there a sidewalk already on the street today, or would providing a sidewalk make a connection to another street that already has a sidewalk. Improving sidewalk connectivity by constructing a new sidewalk would warrant a high score for this category.

7. Environmental Impacts: Are there environmental impacts associated with the construction of a sidewalk? A high score in this category would indicate that there are NOT any environmental impacts, while a low score would indicate environmental impacts could be expected.

8. Construction Challenges: Are there other challenges when constructing a sidewalk; for example, would the proposed sidewalk abut a stone wall, or does the street have a narrow cross section, thus providing minimal clearances from obstructions or vehicles? Are utility poles to be located within the sidewalk;

which could limit the ability to meet ADA requirements? Does street drainage become an issue with a new sidewalk and associated curb? A high score indicates that there are likely minimal challenges during construction.

9. Conforms to Town Goals: Goals and Visions have been identified in past studies throughout the community. For example, the Town's Master Plan. Has the street been identified as part of a previous goal or vision where improvements are needed? If the street is part of another plan, this category would receive a higher score. It is noted that for this category all streets received a score of five, since is was difficult to identify whether one street conformed to Town goals more so than another.

10. Future Need: Are there any known future developments or potential developments that might warrant consideration of a sidewalk? Areas where land could be redeveloped could be of concern, thus a higher score would be considered in this category.

4. Our Recommendations

The matrix that was developed can be sorted by each category or by the total score of all 10 categories. At the end of our scoring, the streets were ranked and sorted based on their ranking. In developing our rankings, the following construction guidelines were discussed and considered:

- Sidewalks should generally be 6-feet wide (including a 6-inch curb) unless there is some constraint that would prohibit this width; however, all applicable ADA requirements shall be met.

- The street cross section should be of sufficient width to accommodate user demand and provide adequate buffers between sidewalks, shoulders, travel lanes, and obstructions such as walls, utility poles, mail boxes, etc. In general, it was decided that the ideal street width to accommodate shoulders for bicycles and travel lanes for cars is 32-feet (5-foot shoulders and 11-foot travel lanes). In some instances, and dependent on the functional classification of the street, etc., the street cross section could be reduced to 26-feet (13-foot shared travel lanes and shoulders).

- Generally, to reduce costs, sidewalks and curbs could be constructed of asphalt; however, certain publicly important areas, such as, downtown and other high visibility areas could include other construction materials, such as concrete, and granite curbing as funding allows.

The following provides a snap shot of the top 10 streets from the matrix table. It is noted that costs associated for each location were not developed, as limited "plan" information was available and the Committee needed to complete this assignment by January 4, 2016. Preparing cost estimates would have significantly increased the amount of time to complete this assignment.

		Sidewalk Construction Recommendation Committee, Evaluation Matrix												
Street Name	***Functional Classification***	***1. Traffic Volumes***	***2. Pedestrian Activity***	***3. Safety***	***4. Available Right-of-Way***	***5. Connects to Destination***	***6. Connectivity***	***7. Environmental Impacts***	***8. Construction Challenges***	***9. Conforms to Town Goals***	***10. Future Need***	***Total Score (out of 100)***	***RANKING***	***Notes***
Marlboro Rd (Rte 85), north of Rte 30	A	9	9	9	9	9	9	8	8	5	1	76	1	Sidewalk on/ north of RR bridge
Newton Street	A	7	6	7	8	8	9	8	7	5	9	74	2	
Cordaville Rd (Rte 85), south of Rte 30 north of Rte 9 (causeway excluded)	A	9	6	9	9	8	8	9	9	5	1	73	3	
Oak Hill Road	A	5	7	9	8	8	8	8	7	5	5	70	4	
Richards Road (east)	C	7	7	6	8	9	8	8	8	5	1	67	5	
Clifford Street	C	5	8	9	8	8	5	6	6	5	5	65	6	
Main Street (west of Sears Rd)	A	9	6	8	9	5	6	8	8	5	1	65	6	State Owned
School Street	L	3	8	6	6	7	9	8	4	5	7	63	8	
Flagg Road	C	5	9	9	7	6	1	6	5	5	9	62	9	
Latisquama Road	C	3	9	6	8	9	7	8	6	5	1	62	9	
Parkerville Rd (south Rte 9, north I-90)	C	5	9	7	9	8	5	6	7	5	1	62	9	

As seen in the image above, Marlboro Road (Route 85, north of Route 30) received the highest score out of all the streets reviewed. Notes were added where appropriate to call out important information that the reader should be aware of. As previously noted, the matrix can be sorted based on street name, any of the ten categories, total score or ranking. Additional engineering is needed to determine more specific impacts and construction costs. It is noted that Main Street (west of Sears Road) was added by the

Committee for future consideration and coordination with MassDOT.

This Committee recommends this criteria and associated ranking matrix be adopted for current use in evaluating sidewalk construction, and for future use in prioritizing how funding limited tax dollars should be spent to improve Southborough's sidewalk network.

For the Committee,

Matthew J. Chase, PE, PTOE
Committee Chair

		Sidewalk Construction Recommendation Committee, Evaluation Matrix												
Street Name	***Functional Classification***	***1. Traffic Volumes***	***2. Pedestrian Activity***	***3. Safety***	***4. Available Right-of-Way***	***5. Connects to Destination***	***6. Connectivity***	***7. Environmental Impacts***	***8. Construction Challenges***	***9. Conforms to Town Goals***	***10. Future Need***	***Total Score (out of 100)***	***RANKING***	***Notes***
Marlboro Rd (Rte 85), north of Rte 30	A	9	9	9	9	9	9	8	8	5	1	76	1	Sidewalk on/ north of RR bridge
Newton Street	A	7	6	7	8	8	9	8	7	5	9	74	2	
Cordaville Rd (Rte 85), south of Rte 30 north of Rte 9 (causeway excluded)	A	9	6	9	9	8	8	9	9	5	1	73	3	
Oak Hill Road	A	5	7	9	8	8	8	8	7	5	5	70	4	
Richards Road (east)	C	7	7	6	8	9	8	8	8	5	1	67	5	
Clifford Street	C	5	8	9	8	8	5	6	6	5	5	65	6	
Main Street (west of Sears Rd)	A	9	6	8	9	5	6	8	8	5	1	65	6	State Owned
School Street	L	3	8	6	6	7	9	8	4	5	7	63	8	
Flagg Road	C	5	9	9	7	6	1	6	5	5	9	62	9	
Latisquama Road	C	3	9	6	8	9	7	8	6	5	1	62	9	
Parkerville Rd (south Rte 9, north I-90)	C	5	9	7	9	8	5	6	7	5	1	62	9	
Route 30, Meadow St to Framingham Rd	A	9	4	9	9	8	9	5	2	5	1	61	12	
Woodland Road (south of I-90)	C	5	7	7	9	6	5	7	8	5	1	60	13	
Framingham Road	A	7	2	8	9	5	5	9	9	5	1	60	13	
Marlboro Rd (west of Framingham Rd)	C	9	7	7	9	3	1	9	9	5	1	60	13	
Cordaville Rd (Rte 85), south of Rte 30 north of Rte 9 (causeway included)	A	9	6	9	5	8	8	6	2	5	1	59	16	Rte 9 Int State Owned
Deerfoot Rd (north of Clifford Street)	C	5	8	9	8	8	5	5	4	5	1	58	17	
Highland Street	L	3	7	6	6	8	7	6	8	5	1	57	18	
Mt Vickery Road (east of Route 85)	L	3	6	9	6	7	5	6	4	5	5	56	19	
Sears Road	L	3	7	9	8	5	5	6	6	5	1	55	20	
Northboro Road	A	7	3	7	9	2	1	8	8	5	5	55	20	
General Henry Knox Road	L	3	4	5	9	5	5	9	9	5	1	55	20	
Middle Road (north of Route 9)	L	5	7	7	7	9	5	4	4	5	1	54	23	
Atwood Street	L	3	7	7	6	7	7	6	5	5	1	54	23	
Chestnut Hill Road	L	5	5	7	8	6	1	6	4	5	7	54	23	
John Matthews Road	L	3	4	4	9	5	5	9	9	5	1	54	23	
Breakneck Hill Road	C	5	5	9	6	7	1	6	4	5	5	53	27	
Pine Hill Road	C	5	5	9	6	1	3	6	4	5	9	53	27	
Mt Vickery Road (west of Route 85)	L	3	6	9	9	7	5	4	4	5	1	53	27	
White Bagley Road	C	5	6	8	9	6	5	4	4	5	1	53	27	
Fisher Road; Schipper Farm Lane Rd to Marlborough	C	7	6	6	9	1	5	6	6	5	1	52	31	
Parmenter Road	C	5	3	9	8	1	1	4	6	5	9	51	32	
Gilmore Road	L	3	4	8	8	4	5	4	4	5	5	50	33	
Jericho Hill Road	C	5	2	7	8	1	1	8	8	5	5	50	33	
Woodland Road (north of I-90)	C	5	4	7	8	4	1	6	8	5	1	49	35	
Deerfoot Rd (south of Clifford St, north of Rte 9)	C	5	6	7	6	6	1	4	6	5	1	47	36	
Middle Road (south of Route 9)	L	5	6	7	8	4	1	5	5	5	1	47	36	
Johnson Road	A	7	3	5	9	2	1	8	6	5	1	47	36	
Oregon Road	L	5	5	8	6	2	1	4	4	5	5	45	39	
Woodbury Road	L	3	5	7	8	3	5	4	4	5	1	45	39	
Route 30, Framingham Town Line to Meadow St	A	9	2	9	6	2	1	5	4	5	1	44	41	State Owned
Lovers Lane	L	3	5	9	8	2	1	4	4	5	1	42	42	
Acrebridge Road	C	7	1	6	8	4	1	4	4	5	1	41	43	
Lynbrook Road	L	3	5	5	9	2	1	6	4	5	1	41	43	State Owned
Edgewood Road	L	3	5	6	8	3	1	4	4	5	1	40	45	
Deerfoot Rd (south of Route 9)	C	5	1	7	8	1	1	5	4	5	1	38	46	
Meadow Lane; Rte 30 to Kallander Dr	L	3	3	3	6	1	1	9	6	5	1	38	46	
Valley Road	L	3	3	7	6	3	1	4	4	5	1	37	48	
Willow Street	L	3	2	8	6	2	1	4	1	5	1	33	49	