INTRODUCTION

The Town has many paths it can take as it plans for its future. The following options and recommendations are based on the Consulting Team's review of existing conditions, the substantial public input received and our understanding of key community goals and objectives. The points below summarize the findings:

- **Recommendation #1:** The Town should engage the Waterville Valley Resort, WVAIA, Lodge Associations, Waterville Company and other business interests and stakeholders to explore its brand and how greater alignment and clarity can be B: Define the "Common" story: reached.
- Recommendation #2: The Town should work to establish an arrival sequence into Town that communicates a strong brand, emphasizes good wayfinding principles, supports broad mobility and drives visitors to the Town Core. The Town should work with the US Forest Service to explore what may be possible on federal land to support a gateway feature.
- Recommendation #3: The Town should work to improve key sidewalks, crosswalks, expand bicycle facilities, improve lighting and improve the visibility of these elements to both reinforce community mobility and send a strong message to locals and visitors that Waterville Valley is "pedestrianfriendly".
- Recommendation #4: The Town should work with the Waterville Valley Resort to identify long-term objectives for the transit system that improve route efficiency, system guality, and support overall community connectivity.
- Recommendation #5: Within the Town Core, the Town should encourage and support greater flexibility in parking, promote a more pedestrian-oriented streetscape, improve access to and use of its "waterfront" resources, consider changes to exterior lighting and reinforce the use of the area as a "hub" of recreation, economy and culture.

Each of these elements will be explored more fully in both written and graphic form on the pages that follow. Case studies are also provided (See **Appendix F** for more information) to help further clarify opportunities and issues.

#1: CREATE BETTER ALIGNMENT ON THE "WATERVILLE VALLEY" BRAND

A: Hold a summit on "Exploring the Waterville Valley Brand":

- Get all key partners together to share their individual idea of the Waterville Valley Brand;
- Understand that all partners need to be able to communicate to their customers. Remember, however, that often they are the SAME customers;
- All voices need to be heard and concerns raised. Like it or not, you are all in the same boat.

- Find areas of common agreement what are the "touchstones" that everyone can agree with?;
- Explore inputs (cultural, historic, natural) that might form a unifying basis for a brand like the "Aspen" leaf (case study below);
- Craft a "Story" for Waterville Valley. Why do people come, what do they do when they are here.

C: Remember it is about the "experience" not the place:

- Explore the qualities that make Waterville Valley **unique** as a place;
- Focus discussions on activities and "emotion" not on specific places. People can ski, shop, dine in LOTS of places. How is that experience different in Waterville Valley;
- Explore ways to integrate the guest experience throughout the community. Can lift tickets be purchased at Town Square? Can recreation passes be purchased at the Resort? Make things easy and seamless. Consider leveraging technology to accomplish;
- Remember that for many the first impression is on the internet; does this communicate the experience?

CASE STUDY - ASPEN. COLORADO

he Aspen brand encompasses four distinct mountains and two municipalities (the City of Aspen and the Town of Snowmass Village), as well as numerous independent businesses that contribute to the experience of the place. A unified brand for the overall destination sits at the top of the "brand architecture" for Aspen, allowing individual entities (i.e. resorts, hotels, restaurants, etc.) to have a sub-brand of their own, while reflecting and reinforcing the core purpose of the overall destination to which they belong (i.e. Aspen with capital "A"). A central component of the success of the Aspen brand is the recognition that the brand must be brought to life across all customer touch points – creating a highly differentiated destination experience. Aspen Ski Company (the resort operator) consistently works alongside the resort municipalities and independent businesses to capitalize on the overall destination brand. An excellent example of this cooperation is Aspen-Snowmass Central Reservations, which markets and books 100% of the hotels in both Aspen and Snowmass and is one of the primary web presence's for the destination brand of Aspen. Central reservations also books Aspen airfare, ground transportation and ski packages. For more information, see Case Study Summaries in Appendix

Brand and Identity



Arrival | Signage & Wayfinding

#2: ENHANCE YOUR GATEWAY / DEFINE A WAYFINDING STRATEGY

A: Conduct a full inventory of signage:

- Building upon the work of this study, document all signage (including trails) in and around town. Note the location, form and purpose (directional, informational);
- **Partner with area organizations** such as the Resort and WVAIA to build this background library of information.

B: Prepare a Signage and Wayfinding Master Plan that achieves the following:

- Identifies WHERE signs are most needed based on the land uses of the community. Ideally such a plan would identify the key destinations and consistently provide direction to them. It would also establish a hierarchy of directional signage which would transition arriving guests to their destination. Primary directional signage should be focused on the Town Core. Secondary signage could be used to identify destinations (lodges, activities, etc.). The figure to the right is a general guide on where key signage might be appropriate as part of a complete wayfinding system;
- Guides WHAT messaging needs to be on any directional or informational signs. Determining what is most important to be directed to upon arrival is an essential part of any good wayfinding master plan process;
- Establishes a **DESIGN hierarchy of signage** forms that can help set dimensional limits, acceptable types and forms and other aesthetic considerations. A master plan would help echo the unified brand through the signage design.

C: Explore ways to establish a "Gateway" feature at the entrance to Town:

- Review options (consistent with the Town's master plan) that establish an arrival or gateway feature. Consider a primary arrival feature before Tripoli Road (joint Resort/Town) and a secondary arrival gateway as close to the entrance of Town as possible. Work with the US Forest Service to study options for placement (See figure to the right, page 33);
- Assure that gateway (and signage) systems function for "event communication"; allow banners to be erected that communicate upcoming events, activities or celebrations.

D: Update sign standards to address the results of a Signage and Wayfinding Master Plan

- Establish policies that limit commercial signage within the public right-of-way with the exception of those in areas established by the community (from the master plan) for such purposes. For example, the Town might want to designate a portion of a sign for a "business of the month" or "sponsoring business" associated with an informational sign and/or event sign;
- In commercial/mixed use areas work to make signage more "pedestrian friendly" by promoting perpendicular signage along building facades, keeping blade size reasonably consistent and pressing for greater consistency in color, font, etc. Work to blend recommendations/outcomes from branding process into any regulatory requirements on signage design.

Mammoth Lakes.

For more information, see Case Study Summaries in Appendix







CASE STUDY - MAMMOTH LAKES, CALIFORNIA

Mammoth Lakes is the only incorporated community in Mono County, California, surrounded on all sides by the Inyo National Forest. As a mountain resort community, Mammoth Lakes' economy is primarily tourism-based, creating a strong need for effective wayfinding and consistent community branding. The Mammoth Lakes Wayfinding Plan and resulting signage has been very effective at both branding the community and directing travelers. The signs incorporate the branding and identity standards for the community, which transcend mediums extending from the web, to printed materials all the way through to the built environment, and provide a seamless journey for visitors as they transition from State Roads to their destination in the Town of

Arrival | Signage & Wayfinding

PD



MAP LEGEND

- (A) TOWN SQUARE
- **(B)** SNOWY OWL INN
- **C** GOLDEN EAGLE LODGE
- **(D)** BLACK BEAR INN
- **(E)** CONFERENCE CENTER
- **(F)** ATHLETIC CENTER
- **(G)** ELEMENTARY SCHOOL AND REC CENTER
- (**H**) CURIOUS GEORGE COTTAGE
- (I) MUNICIPAL OFFICES
- (\mathbf{J}) GOLF COURSE
- **(K)** TENNIS COURTS
- **(L)** SNOWS MOUNTAIN AND BBTS
- (M) OSCEOLA LIBRARY









Pedestrian Systems

MAP LEGEND

- (A) TOWN SQUARE
- **B** SNOWY OWL INN
- **(C)** GOLDEN EAGLE LODGE
- **D** BLACK BEAR INN
- (\mathbf{E}) CONFERENCE CENTER
- (\mathbf{F}) ATHLETIC CENTER
- **G** ELEMENTARY SCHOOL AND REC CENTER
- (\mathbf{H}) CURIOUS GEORGE COTTAGE
- (I) MUNICIPAL OFFICES
- (\mathbf{J}) GOLF COURSE
- **K** TENNIS COURTS
- **L** SNOWS MOUNTAIN AND BBTS
- M OSCEOLA LIBRARY

LEG	END		
	Primary Shared-Use Road		Village Road Redevelopment
	Secondary Shared-Use Road		Engage the Waterfront
	Existing Trails		Public Open Space
	Existing Sidewalk		Public Parking
	Proposed Trail		Town Core Area
	Proposed Sidewalk		On Street Parking
	Proposed Multi-Use Trail		
	Bus Stop-Local Route	Image: A start of the start	Esisting Trail Head
	Bus Stop-Express Route	Œ	Proposed Trail Head
\diamond	Recreation Access Point	0	"Public" Parking Lot
8	Proposed Crosswalk	PG	Potential Parking Garage
	Existing Crosswalk	PS	Pedestrian Open Space
	Existing Trail Underpass	*	Snows Brook Crossing
1122	Side Fille		Section and

#3: IMPROVING THE USER EXPERIENCE - SIDEWALKS AND CROSSWALKS

A: Improve accessibility to pedestrian system

• Make all pedestrian ramps Americans with Disabilities Act (ADA) compliant. This means improving the geometry and materials at the deficient ramps. It also means installing **Detectable Warning Surfaces (DWS)** in the pedestrian ramps for the benefit of vision impaired pedestrians. This includes locations where multi-use paths cross roadways. (See figure, page 34)

B: Make pedestrian crossings more visible

- Consider Town-wide adoption of the ladder style reflectorized crosswalk pavement markings for new and rejuvenated crosswalks. Adjust existing and proposed skewed crosswalks to be perpendicular wherever possible. An example is the existing skewed crosswalk across Valley Road at Packard's Road opposite the athletic center;
- Install reflectorized crossing signs at mid-block crossings as well as at crosswalks on a main road at intersections where the main road is not stop controlled;
- Consider **Rectangular Rapid Flashing Beacons (RRFB's)** at pedestrian crossings on primary roads and where there is known pedestrian activity. We advise against overuse of RRFB's throughout the Town since it can dilute their effectiveness. Likely candidate locations for RRFB's are crosswalks on Valley Road at Tecumseh, Packard's, Village and Boulder Path Roads. The mid-block crossings on Boulder Path Road may also be appropriate locations for RRFB's. An added side benefit to adding RRFB's on Valley Road is that they will provide yet another visual key that pedestrian accommodations are important in Town;
- The addition of attractive pedestrian scale street lighting along key roadways such as Valley Road, Village Road and Snows Brook Road would enhance pedestrian travel within the community. It would also promote the image that pedestrian accommodations are important within the Town. Beginning the lighting on Valley Road at the gateway to Town near Tripoli Road would immediately signal the transition to a pedestrian friendly environment when people come to Town.

ANATOMY OF A PEDESTRIAN CROSSING



KEY

A: Ladder-style reflectorized crosswalk markings B: Detectable Warning Surface (DWS) C: Reflectorized crossing sign OR RRFB D: Pedestrian-scaled street lighting

WHAT ARE?



Rectangular Rapid Flashing Beacons (RRFB's) consist of pedestrian actuated flashing strobe lights attached to the crossing signs located on both sides of the crossing. These are intended to catch the attention of motorists when there are pedestrians crossing or waiting to cross. They do not stop traffic like other options so pedestrians must still judge when it is safe to cross. RRFB's are appropriate on roadways with speeds under 40 MPH, and there are no pedestrian volume warrants to be met. RRFB's are relatively low cost and can be solar powered.

Quechee Lakes is a four season resort community of about 650 residents with many similarities to the Town of Waterville Valley. The community is nestled in the incredible mountain environment of the Ottauquechee River Valley and contains a variety of shops and restaurants, 19 condominium villages and over 600 single-family homes. It is also home to the small Quechee Lakes Ski Area. The resort village was initially developed in 1968, and since that time has continued to evolve and continue to embrace New England influences.

Prior to 2009 the "formalized" circulation routes in Quechee Lakes were very limited, with sidewalks only at the Village center and green. Other pedestrian circulation within the remaining Core area was more informal and primarily occurred in the road right-of-way, often along golf cart paths and/or service roads. To address these pedestrian connectivity issues, the community embraced the existing informal use, creating an integrated system of primary and secondary circulation routes. The formalized or primary routes were focused within the village core area to support connection between various recreational and cultural facilities/amenities and parking areas, and secondary systems were created within common lands, adjacent to river banks, golf fairways and other 'off-road' alignments.



Pedestrian Systems

CASE STUDY - QUECHEE LAKES, VERMONT

For more information, see Case Study Summaries in Appendix



#3: IMPROVING THE USER EXPERIENCE - SIDEWALKS AND CROSSWALKS (CONTINUED)

C: Seek to improve function and operational efficiency of existing facilities:

- For new or rehabilitated sidewalks meet the minimum 5 foot paved width;
- Widen the sidewalk along Snows Brook Road to a 6 foot width closer to the road to make winter maintenance by the Town possible should be explored. Refer to Section #4 in the Study (page 39) for a graphical representation of the improvements;
- Realign the crosswalk across Snows Mountain Road to cross in front of the stop line. The existing crossing is aligned behind the stop line, which is prohibited. The existing path has two mid-block crossings of Boulder Path Road. The northern crossing is skewed and we recommend reconfiguring it to a perpendicular crossing with the appropriate crossing signs;
- At the four-way intersection of Valley Road, Village Road and Lost Pass Road construct (in the near term) a short sidewalk from the northern crosswalk to the golf course parking lots since it is a likely destination and since pedestrians can access Lost Pass Road from there (See figure, page 34).

D: Fill in the "gaps" of the existing sidewalk system:

- Consider the construction of a new 6 foot wide sidewalk along the "inside" curve (northern edge) of Tecumseh Road. See Section #4 in this Study as a reference for this proposed condition;
- Explore improvements to the "informal" trail near the Golden Eagle to connect to Town Square. Integrate with other facilities such as sidewalks, bus stops and wayfinding;
- Upgrade (resurface, new stairs, new lighting) the existing trail from the Conference Center to Snow Brook.

E: Renew the connection across Snow's Brook

- Study engineering options for crossing Snow' Brook. Consider potential reuse of existing crossing point and/or new crossing point aligned with "Golden Eagle" trail (See sketch at right and figure, page 34);
- Explore alternatives to traditional and expensive bridges; things such as rope bridges, hand carts, etc. Make crossing beneficial for mobility AND fun....draw people down to the water.



TOWN OF WATERVILLE VALLEY - NEW HAMPSHIRE PEDESTRIAN VILLAGE REVITALIZATION STUDY

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Pedestrian Systems



[37]

Recommendations

#3: IMPROVING THE USER EXPERIENCE -EMBRACING BICYCLING

Waterville Valley has a real opportunity to expand and enhance its bicycle accommodations. While at present these facilities are sparse, both the survey results and stakeholder meetings suggest locals and visitors routinely use bicycles while in Town. Making that experience as enjoyable as possible should be a priority.

A: Let people know bicycling is a great way to get around Waterville Valley:

 Add secure bike parking at key destinations. This would include destinations such as Town Square, the schools and recreation center, tennis courts, Osceola Library, Snows Mountain and BBTS. Bike parking should be encouraged at existing private establishments and lodges, and the Town may wish to consider requiring bike parking at future developments. Bike racks should also be added to transit system busses if possible.

B: Share the Road:

- Wider shoulders or bike lanes on Valley Road could be considered for accommodating on-road cycling. The Development of Bicycle Facilities (the AASHTO Guide) indicates that striped shoulders and bike lanes should be a minimum of 4 feet wide without curb and 5 feet wide with curb. To accommodate these widths, the width of the travel lanes would need to be reduced to 10 feet on the uncurbed side and 9 feet on the curbed side. While changes of this nature are often considered when roadways are resurfaced, 9 foot lanes are not recommended;
- Tecumseh Road is not wide enough for bike lanes and widening for that purpose is not proposed or warranted. It is a local roadway with low volumes and speeds and the expectation is that cyclists will share the road with motor vehicles. We recommend the installation of shared use arrows (also referred to as "sharrows") and "Share the Road" signs. This will alert motorists to expect cyclists in the road.



Pedestrian Systems

#3: EMBRACE BICYCLING (CONTINUED)

This is proposed with the understanding that children and other inexperienced cyclists may still ride on the sidewalk. Expanding the sidewalk to 8 feet wide is possible if this is a strong concern.

C: Create a Multi-Use Path to support better mobility and connectivity

- There is a great opportunity to complete a **multi-use path** along Valley Road, Snow's Brook Road and Boulder Path Road. Snows Mountain is a destination for some mountain bikers and there are hiking trails that emanate from the vicinity of Cascade Ridge Road at the end of the proposed path. Overall this path would be about <u>1.45 miles</u> in length;
- The multi-use path would be constructed from Tripoli Road to Boulder Path Road. To accomplish this there will be right-ofway impacts due to added width and the required slope work. One of the benefits would be that the path would provide a connection from Valley Road to the existing trail system that does not exist today. One of the primary challenges will be the Snows Brook crossing. That crossing would likely require a prefabricated pedestrian bridge with a span of at least 100 feet due to the floodplain and wetlands in the area. The relatively high cost of these improvements may warrant phasing the implementation of the path;
- This path may supplant the need for wider bicycle lanes along Valley Road (See Goal B);
- Connect a multi-use path to Village Road when/if it is upgraded to a more pedestrian character. Bikes would share the road within the village center typical section. The expectation is that traffic volumes would be very slow through this segment. Cyclists would be very well accommodated by the planned multi-use path between Town Square and Valley Road. Inexperienced cyclists would be encouraged by signing to walk their bikes on the sidewalks through the village section. *Refer to Sections #2 and #2A of the Streetscape Sections figure (page 39) in this document for a graphical representation of the improvements.*

WHAT ARE?

"Sharrows": Shared lane arrows or "sharrows" are painted markings that assist cyclists with lateral positioning in a shared lane. This is often done in areas with on-street parallel parking in order to reduce the chance of a bicyclist's impacting the open door of a parked vehicle. Sharrows also can assist cyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane. From a safety perspective, sharrows can alert motorists that bicyclists are likely to occupy space within the traveled way, help encourage safe passing of bicyclists by motorists and reduce the incidence of wrong-way bicycling.

"SHARROWING" THE ROAD!





CASE STUDY - KEENE, NEW HAMPSHIRE

Keene is a small New Hampshire city with a big bicycle and pedestrian network. The city is home to Keene State College and Antioch University New England, and hosts tourists year round. Keene is interconnected with sidewalks, on-road routes, and multi-use paths. Supported by organizations such as Pathways for Keene and the City of Keene Bicycle / Pedestrian Path Advisory Committee, the City actively promotes the development and use of public bicycle and pedestrian pathways in the City. Sidewalks spread throughout the small city and trails connect the downtown to forested parks and active farms to accommodate all levels of experience and expectations. Trails include paved, gravel and natural surfaces to offer a variety of experiences.

For more information, see Case Study Summaries in Appendix



Pedestrian Systems





Streetscape Sections



#4: IMPROVING THE TRANSIT EXPERIENCE

A: Revise the bus routes to reduce wait times:

- Consider adopting a dual route service. The Consulting Team evaluated a Green Line/Blue Line strategy. The Green Line would act as an "express" service to/from the Resort. The Green Line would have 7 stops, including at Town Square. Estimated peakusage round trip times for the Green line are 35 minutes. The Blue Line service would add more stops (21 total stops, including at lodges) and have a longer route trip time during peak days. See Figure to the right and information on the subsequent pages that identifies a conceptual transit route and associated travel times;
- Strive to adjust the routing/scheduling so route trip times are minimized;
- During non-winter months, promote use of "Green Line" stops walking distances are generally 5 minutes;
- Work with the Waterville Resort to collect more/better ridership data (day of week, time of day, point of origin) so that future decision-making can be made with better empirical data.

B: Make the experience better while waiting:

- At the identified "Green Line" install more formalized bus stops that include a covered shelter, bench, transit system route map and information, community information sign, ski rack, bike rack and connectivity to sidewalks;
- Add lighting to the bus stop area (in and around) to make it safe and inviting;
- Re-brand busses to reflect the results of any branding study/result;
- Study options such as "real-time" route map "apps" that can track bus progress and communicate it via the internet.

C: Address management of the transit system

- Continue dialogue with the Waterville Valley Resort and Lodge Associations to explore ways to more **fully integrate community transit needs** with resort operations;
- Develop a specific set of "performance standards" for the bus system, identifying ideal scheduling on a seasonal/daily basis, expectations on communication of system status, expectations on costs and reimbursement rates;
- Consider reconstituting the Transportation Authority to bring all interests together in the discussion.

D: Seek outside funding for community transportation

• Recognize that the system is not simply a resort shuttle. Position the community to **find outside (state, federal) funding sources** to support improvements to the system.

CASE STUDY - CRESTED BUTTE, COLORADO

Crested Butte is a Colorado ski town that has retained the small town charm and adventurous soul that sets it apart from other mountain locations. With no traffic lights or chain stores, the genuine nature of the community and the pristine surroundings are at the forefront of the experience of the place. Crested Butte is known for having one of the best shuttle systems of any ski town in the US, allowing residents and visitors to enjoy the mountain, town, and nightlife while letting someone else do the driving. The Crested Butte Town Shuttle and Crested Butte Mountain Express run the 3 miles between Mt. Crested Butte and the historic town from many convenient locations in the surrounding community. Condo Loop and Outer Condo Loop Shuttles also depart from Town Center throughout the day in the winter. The transit stops are well planned and integrated into the built environment of the community and the free bus service provides very convenient year-round transportation for visitors and residents of Crested Butte and Mt. Crested Butte. The system is funded by a portion of sales taxes collected by the towns and a portion of admission taxes collected by Mt. Crested Butte, as well as State and Federal grants.

For more information, see Case Study Summaries in Appendix



Transit Services



Transit Services







SET A SCHEDULE

The Study identified the need to streamline the number of stops. The tables below are the conceptual travel times for the Consulting Team's Green Line / Blue Line strategy. These are only estimates and more work should be done as part of a comprehensive transit plan to fine tune the design. These estimates point out, however that with adjustment, the experience can be improved.

Waterville Valley - Green Bus Route (Express)

Peak Period - Weekend/Holiday

							Bus Stop		Total Travel Time				
	Dista	ance	Speed (mph)		Travel Time			Delay ~	Ski Resort	to Village	Village to	Ski Resort	
Bus Stop Location / Route	Feet	Miles	Posted	Traveled*	Hours	Minutes	Seconds	Seconds	Minutes	Seconds	Minutes	Seconds	
Waterville Valley Ski Resort								240		(Round Trip)	35	2121	
Tripoli Rd/Valley Rd	12600	2.39	30-35	35	0.068	4.09	245						
1 School / Rec Center								150	11	635	31	1876	
Valley Rd/Packard Rd	980	0.19	30	25	0.007	0.45	27						
2 Golden Eagle Lodge								150	14	812	28	1699	
Packard Rd/Snow's Brook Rd/Village Rd	2630	0.50	30	25	0.020	1.20	72						
3 Town Square								150	17	1034	25	1477	
Village Rd/Valley Rd/Boulder Path Rd	2600	0.49	30	25	0.020	1.18	71						
4 Boulder Path Rd/Snow's Mountain Rd								120	20	1225	21	1256	
Boulder Path Rd	1620	0.31	25-30	25	0.012	0.74	44						
5 Boulder Path Rd/Cascade Ridge Trail								120	23	1389	18	1092	
Boulder Path Rd/Snow's Brook Rd	3620	0.69	25-30	25	0.027	1.65	99						
6 Snow's Brook Rd/Oscela Rd								150	27	1638	15	874	
Snow's Brook Rd/Tecumseh Rd	3050	0.58	30	25	0.023	1.39	83						
7 Tecumseh Rd/Innsbruck Way								150	31	1871	11	640	
Tecumseh Rd/Valley Rd/Tripoli Rd	12850	2.43	30-35	35	0.070	4.17	250						
Waterville Valley Ski Resort								240	35	2121 <	(Round Trip)		

* Speed Traveled - Represents the expected average bus speed between stops - estimated from posted speed limit

~ Bus Stop Delay - Represents the expected average time for passengers to load and unload the bus.

XX - Entered Value.

Waterville Valley - Green Bus Route (Express)

Off-Peak Period - Non Weekend/Holiday

						Bus Stop	Total Travel Time					
	Distance Speed (mph) Travel Time		ne	Delay ~	Ski Resort to Village		Village to Ski Resort					
Bus Stop Location / Route	Feet	Miles	Posted	Traveled*	Hours	Minutes	Seconds	Seconds	Minutes	Seconds	Minutes	Seconds
Waterville Valley Ski Resort								180		(Round Trip) >	27	1641
Tripoli Rd/Valley Rd	12600	2.39	30-35	35	0.068	4.09	245					
1 School / Rec Center								90	9	515	23	1396
Valley Rd/Packard Rd	980	0.19	30	25	0.007	0.45	27					
2 Golden Eagle Lodge								90	11	632	21	1279
Packard Rd/Snow's Brook Rd/Village Rd	2630	0.50	30	25	0.020	1.20	72					
3 Town Square								90	13	794	19	1117
Village Rd/Valley Rd/Boulder Path Rd	2600	0.49	30	25	0.020	1.18	71					
4 Boulder Path Rd/Snow's Mountain Rd								60	15	925	16	956
Boulder Path Rd	1620	0.31	25-30	25	0.012	0.74	44					
5 Boulder Path Rd/Cascade Ridge Trail								60	17	1029	14	852
Boulder Path Rd/Snow's Brook Rd	3620	0.69	25-30	25	0.027	1.65	99					
6 Snow's Brook Rd/Oscela Rd								90	20	1218	12	694
Snow's Brook Rd/Tecumseh Rd	3050	0.58	30	25	0.023	1.39	83					
7 Tecumseh Rd/Innsbruck Way								90	23	1391	9	520
Tecumseh Rd/Valley Rd/Tripoli Rd	12850	2.43	30-35	35	0.070	4.17	250					
Waterville Valley Ski Resort								180	27	1641 <	(Round Trip)	

* Speed Traveled - Represents the expected average bus speed between stops - estimated from posted speed limit

 $\,\,{}^{\sim}\,$ Bus Stop Delay - Represents the expected ~average time for passengers to load and unload the bus.

XX - Entered Value.

Waterville Valley - Blue Bus Route (Lodges) Off-Peak Period - Non Weekend/Holiday

							Bus Stop	Total Travel Time				
	Dist	ance	Speed	Speed (mph) Trav			ravel Time		Ski Resort	to Village	Village to	Ski Resort
Bus Stop Location / Route	Feet	Miles	Posted	Traveled*	Hours	Minutes	Seconds	Seconds	Minutes	Seconds	Minutes	Seconds
Waterville Valley Ski Resort								180		(Round Trip) >	49	2960
Tripoli Rd/Valley Rd	11500	2.178	30-35	35	0.062	3.73	224					
1 Valley Rd/Jennings Peak Rd								90	8	494	46	2735
Valley Rd	1060	0.201	30	25	0.008	0.48	29					
2 Valley Rd/Noon Peak Rd								90	10	613	44	2617
Noon Peak Rd	1900	0.360	25-30	20	0.018	1.08	65					
3 Noon Peak Rd (end)								60	12	738	41	2462
Noon Peak Rd	1080	0.205	25-30	20	0.010	0.61	37					
4 Noon Peak Rd (middle)								60	14	835	39	2365
Noon Peak Rd/Valley Rd/Packard Rd	1725	0.327	25-30	25	0.013	0.78	47					
5 Packard Rd/Sunnyside Way								60	16	942	38	2258
Packard's Way	480	0.091	30	20	0.005	0.27	16					
6 Golden Eagle Lodge								90	17	1048	36	2182
Packard's Way	925	0.175	30	20	0.009	0.53	32					
7 Conference Center								90	19	1169	34	2060
Packard's Way/Snow's Brook Rd/Village Rd	2200	0.417	30	20	0.021	1.25	75					
8 Black Bear Inn								90	22	1334	32	1895
Village Rd	920	0.174	30	20	0.009	0.52	31			4450		4774
9 Snowy Owi Inn		0.000	20		0.004	0.25	45	90	24	1456	30	1//4
Village Rd	440	0.083	30	20	0.004	0.25	15	00		4504	20	4660
10 Town Square	000	0.470	20	25	0.007	0.44	25	90	26	1561	28	1669
Village Ra	900	0.170	30	25	0.007	0.41	25	<u> </u>	27	1645	26	1554
11 Valley Rd/Lost Pass Ru	1900	0.241	20	25	0.014	0.92	40	60	27	1045	20	1554
12 Roulder Path Rd (Snows Mtn Rd	1800	0.341	30	25	0.014	0.82	49	60	20	175/	24	1445
12 Boulder Patil Ru/Shows With Ru	950	0 1 6 1	20	25	0.006	0.20	22	00	29	1754	24	1445
13 Snow's Mtn/BRTS	650	0.101	50	25	0.000	0.59	25	00	21	1868	23	1362
Boulder Path Rd	850	0 161	25	25	0.006	0 30	23	30	31	1000	23	1302
14 Boulder Path Bd/Cascade Bidge Bd	050	0.101	25	25	0.000	0.55	25	60	33	1951	21	1249
Boulder Path/Snow's Brook/Osceola	5100	0.966	25-30	25	0 039	2 32	139	00	55	1551		1245
15 Osceola Rd (end)	5100	0.500	25 50	25	0.035	2.52	155	60	36	2150	17	1050
Osceola Rd	900	0.170	25-30	20	0.009	0.51	31	00		2200		2000
16 Osceola Rd (middle)	500	0.170	23 30	20	0.005	0.51	51	60	37	2241	16	959
Osceola Rd	625	0.118	25-30	20	0.006	0.36	21	00	•			
17 Osceola Rd/Snow's Brook								60	39	2322	15	878
Snow's Brook Rd	800	0.152	25-30	25	0.006	0.36	22					
18 Snows's Brook Rd/Tyler Spring Way								90	41	2434	13	796
Snow's Brook Rd	725	0.137	30	25	0.005	0.33	20					
19 Snows's Brook Rd/Mtn Brook Way								60	42	2514	11	686
Snow's Brook Rd/Tecumseh Rd	825	0.156	30	25	0.006	0.38	23					
20 Tecumseh Rd/Mtn Brook Ln								60	43	2596	10	604
Tecumseh Rd	850	0.161	30	25	0.006	0.39	23					
21 Tecumseh Rd/Innsbruck Way								90	45	2709	9	520
Tecumseh Rd/Valley Rd/Tripoli Rd	12850	2.434	30-35	35	0.070	4.17	250					
Waterville Valley Ski Resort								180	49	2960 <	(Round Trip)	

* Speed Traveled - Represents the expected average bus speed between stops - estimated from posted speed limit. ~ Bus Stop Delay - Represents the expected average time for passengers to load and unload the bus.

XX - Entered Value.

Transit Service

#4: TOWN CORE - THINK "SHARED" PARKING

Shared parking should be promoted and developed within the Town Core. Shared parking relies on the fact that people can (and will) get out of their cars and enjoy the amenities in a pedestrianfriendly setting.

A: In the near-term work to reconfigure the existing parking to be more efficient and pedestrian friendly

- The existing parking lot serving Town Square/Black Bear Lodge and Snowy Owl Inn on the Waterville Company lot could be improved, enhancing its appearance from the roadway, reducing operational costs and opening up some additional parking. A conceptual study of lot (see right) adds a more prominent collector walk, enhances the street edge and makes the lot easier to maintain:
- While the lot is private, the Town should work with all parties to explore how near-term improvements might be done that leverage longer-term opportunities. Setting the crossing point, in advance of new development, for example, might help assure strong pedestrian connection in the future.

B: Consider on-street parking:

- Portions of Village Road between Valley Road and Black Bear Lane are wide enough to support on-street parallel parking. This is conceptually shown on the figure to the right as well as on Section #2 and #3 on the Streetscape Sections (page 39). On street parking can provide very convenient, short term parking in support of area businesses, restaurants and shops;
- On future roads within the Town Core area, encourage the development of on-street parking. Whether required under zoning/subdivision review or established through a publicprivate partnership to establish a public road connecting Village Road and Snow's Brook Road, the Town should strive to encourage publicly accessible on-street parking within the C1 district;
- Explore changes to the zoning ordinance that support the



development of on-street parking. This might be done by developing a shared-parking "overlay" district encompassing the C1 area, within which on-street parking is required and/or encouraged;

Consider both "carrots and sticks" related on on-street parking - incentives for reduced "off-street" parking if use is proximal to on-street parking areas.







C: Plan now for structured parking:

 As noted earlier in our analysis, the Town has no public parking and while parking in/around Town Square is generally adequate, the Town should consider the longterm. When additional development is proposed within the Town Core it will, undoubtedly, need to address its new parking demands as well as continue to satisfy existing ones. While a shared parking strategy might allow reducing parking requirements on a per-use basis, the Consulting Team believes a structured parking area will eventually be needed to assure the core can reach enough density to make its development economically viable and beneficial to the sustainability of the community. With this in mind, the Consulting Team has identified one location, on Town Square lands adjacent to the municipally-owned hockey rink, that we believe might be a good candidate for future development of off-street structured public parking. The candidate area is shaded in blue below.



The concept is a two-level, above-grade structure of approximately 200 spaces positioned in front of the existing Hockey Rink and connected via its second level directly to Town Square. The first level of the garage would require a higher floor-to-floor to allow it to continue to provide service access to Town Square.

The concept achieves three important goals:

- 1. Adds significant parking in the Town Core that is proximal to the major commercial center;
- 2. Affords an opportunity to soften the appearance of the northwestern facade of the Hockey Rink;
- 3. Provides covered parking in winter for Town Square; a real plus!
- While the need for structured parking is not in the near-term, the Consulting Team believes it is important for the Town to think about future options and work in a collaborative way with all relevant parties to assure that future parking is available for the needs of all who come to visit, stay, or play in Waterville Valley.

D: Put some parking where it is needed:

The Town should consider building a small parking area (10-12 cars), integrated with bus stops and recreational access signage, near the intersection of Cascade Ridge Road and Boulder Pass. This would support access to NFS lands and perhaps act as "overflow" parking for BBTS during events.

E: Reduce parking requirements:

- As the Town moves forward in its thinking about shared parking and its role in shaping future development growth, it should also examine its zoning language and, in general, reduce parking requirements;
- Consider adopting zoning requirements that requires development to support on-street parking. Allow guest spaces to be off-property as long as they are connected by pedestrian systems. Require new parking to be connected to the overall pedestrian and transit system.

narison of Off-Street Parking St

•	Ŭ				
Community	Multi-	Family	Hotel	Retail	Restaurant
	Small (1-2 bedrooms)	Large (3+ bedrooms)	Per bedroom (lodging unit)	Per Sq Ft	
Waterville Valley, NH	1.5	2	1.125	0.005	1 per 4 seats
Killington, VT	1	2	1 + ⁷	0.003	1 per 3+8
Stowe, VT	1-1.6	2.4-3.6	0.9	0.006	1 per 50 gsf
Conway, NH	2	2	1.1	0.005	1 per 3
Ludlow, VT	2	2	1	0.005	1 per 150 sf of seating
Mt. Crested Butte, CO ⁹	1	2	.75	0.003	1 per 300 sf
Vernon, NJ	1.5	1.5 ¹⁰	1.5 ¹¹		0.01312
Red Lodge, MT	2	2	1	0.005	1 per 3 seats
Aspen, CO	1	1	0.5	0.001	1 per 1000 sf

Killington requires an additional space for each employee "at peak times". Number is per lodging unit ⁸ Killington requires an additional space for each employee "at peak times". 9 Parking requirements are lower for "enclosed spaces", i.e. garage

¹² Inclusive of both retail/rest. Data provided for the Mountain/Resort District - most applicable

CASE STUDY - ASPEN, COLORADO

To reduce parking demand and increase the efficient use of space, Aspen provides community bicycle parking throughout town. As a resort community, special factors such as events and seasonal demand are also considered. In addition to on-street, shared parking is the 340-space Rio Grande Parking Garage, which provides convenient covered parking that is only a short walk from Aspen's downtown businesses.

For more information, see Case Study Summaries in Appendix



Parking

¹⁰ Vernon Township requires 1.5 spaces per dwelling unit. 1 of those spaces must be in a garage

¹¹ Vernon Township requires that 0.85 spaces per hotel unit are in garage units.



Engaging the Waterfront & the Forest

#4: TOWN CORE - ENGAGEMENT

The Town has a real opportunity to expand accessibility to both Snow's Brook and the surrounding lands of the White Mountain National Forest. The abundance of trails that enter Town serve as a reminder that Waterville Valley is an outpost in the great north woods. Access to trails for hiking, walking and nordic skiing can be improved as can the connection to Corcoran's Pond.

While some of these areas are designated as Open Space in the zoning, allowing subtle improvements that enable them to function better and contribute to recreational access and economic vitality may be beneficial.

A: Improve and encourage connections to/from Snows Brook:

- Explore the options described above for exploring connections to the area from near Golden Eagle and improving the existing Conference Center trail (See sketch at right);
- Improve signage and wayfinding in/around Snows Brook to assure it points the way to both the outside and inside. Remember, the trail network connects places within Waterville too;
- Encourage future development to actively engage the waterfront in the form of outdoor spaces (plazas) and seating areas, particularly in/around the Town Square area.





B: Encourage greater access to Corcoran's Pond:

 As future development occurs, the Town should encourage and support public access to areas around Corcoran's Pond. This might include such things as walking paths, boardwalks, etc.

C: Make Recreational Access points a part of future planning:

- As shown on the Pedestrian Systems Plan (See page 34), the Consultant Team has identified a number of locations where it believes informational kiosks, placard, etc. might be established that **highlight recreational access** within the area. This might include map showing nearby trails, recreational amenities (golf course, recreation center), event schedules, etc.;
- Work to develop a better local and regional trail map that highlights both the connections to the White Mountain National Forest as well as the



Connecting to the Mountain / Lighting

#5: TOWN CORE - RESORT LINKAGES

The idea of a gondola connection from the Town Core area of Waterville Valley to the Waterville Valley Resort has often been discussed. Certainly it would represent a real "game changer" in terms of overall connectivity within Town. A gondola connection would make mobility to/from the Resort much more convenient and reduce transit needs, it would enhance the quality of all real estate in the area of the base terminal by making it more "ski-to/ ski-from" and it would provide a novel experience not replicated in the East.

The Consulting Team has considered possible alternatives for a gondola connection and at a highly conceptual level they appear to work. We have not completed any engineering analysis, evaluated right-of-way issues, investigated permitting requirements or other detailed assessments.

A: Keep the option on the table

- Development of a gondola connection would, at best, be expensive and is subject to considerable technical, legal and permitting evaluations and assessments;
- In future planning for the Town Core, the Town should encourage continued planning and consideration for an aerial easement that might support a future connection;
- In doing so, the Town could preserve future options for lift connectivity.

B: Remember it needs to support overall mobility

If a gondola connection comes, the Town should work to assure it supports the broader pedestrian and transit solutions outlined in this Study and as envisioned in the Town Master Plan. Any future base terminal should be integrated into the transit system, connected to the pedestrian system, clearly identified as a wayfinding stop and be visible to the public.

CASE STUDY - BRECKENRIDGE, COLORADO

he BreckConnect Gondola connects the Town of Breckenridge to the Peak 8 base area of Breckenridge Ski Resort. The gondola carries eight passengers and takes about ten minutes to complete the full length, with a capacity of about 3,000 passengers per hour. Two mid-stations are provided along the 1.5 mile ride, which traverses the pristine Cucumber Gulch a wildlife habitat, one at the base of Peak 7 and one in the Shock Hill residential area. The gondola is within a minute or two walk of Main Street in Breckenridge and most of downtown is located within 5-7 blocks of the gondola. In addition, the gondola allows skiers to park in town near Main Street and take the gondola in order to access the mountain and ski trails. The free gondola operates from 8:30 am to 4:30 pm in both the summer and winter with seasonal hours in the shoulder seasons. In the winter skiers and snowboarders can download on the gondola at the end of the day or take the Skyway Skiway trail back to the parking lot.

For more information, see Case Study Summaries in Appendix



#5: TOWN CORE - BALANCING DARK SKIES WITH SAFETY AND VITALITY

Many areas of Town are dark and this does not support a robust and active pedestrian environment; particularly in the Town Core.

Ordinance:

B: Establish a plan for replacement of existing fixtures and addition of new ones:

- not roadways;
- private development.

A: Consider a Dark Skies compliant lighting

The most recent Model Lighting Ordinance (MLO, June 2011) from the International Dark Sky Association (in collaboration with the Illuminating Engineering Society) provides a good starting point for re-examination of the Zoning Ordinance. Firstly the MLO establishes a "zonal" prescription for outdoor lighting which defines areas within a community where lighting outcomes are sought. For example, the LZ-0 zone is established in areas where outdoor lighting is not desired such as wilderness areas. Conversely, the LZ-1 zone seeks low ambient lighting consistent with low-density residential use;

Consider applying a lighting prescription for areas along Valley Road and within the C1 zoning district consistent with the LZ-2 zone parameters of the MLO For other areas of Town, consider the LZ-0 or LZ-1 parameters.

The Pedestrian Circulation Plan (See Page 34) identifies areas along Valley Road and in/around the C1 district as the most likely candidates for pedestrian lighting improvements. As fixtures within the Town's right-of-way become obsolete or as the Town engages in any reconstruction activities, it should update the lighting to meet adopted requirements;

New lighting should be primarily focused on pedestrian spaces

The use of LED (light emitting diode) or energy conservationminded fixtures should be encouraged for both Town and

C: Remember lighting for other elements of the pedestrian system:

• While the Consulting Team strongly recommends increasing lighting levels within specific areas of Town, it also strongly encourages the Town to make sure new bus stops, entry signs and other important elements of the transit and wayfinding system are appropriately illuminated so they are attractive, inviting and function according to their intent.

WHAT ARE?

Lighting Zones (LZ's) are defined areas within which specific standards for outdoor lighting are established under a Dark Skies compliant lighting ordinance. The range of LZ's vary from LZ-o to LZ-3 and essentially increase in the intensity of lighting that is allowed to maintain adequate nighttime visibility. The C1 zoning district which largely correlates to the Town Core is a good candidate are for LZ-2. As stated in the model lighting ordinance, "Lighting Zone 2 pertains to areas with moderate ambient lighting levels. These typically include multifamily residential uses, institutional residential uses, schools, churches, hospitals, hotels/motels, commercial and/or businesses areas with evening activities embedded in predominately residential areas, neighborhood serving recreational and playing fields and/or mixed use development with a predominance of residential uses."



CASE STUDIES - NEW HAMPSHIRE

There are over 30 New Hampshire communities that have incorporated broader outdoor lighting regulations that specifically address preservation of dark skies, either in the form of zoning or other ordinances or in planning board regulations. In larger towns, lighting regulations may need to be more detailed and varied, but for most New Hampshire towns effective outdoor lighting regulations may be comparatively brief, simple and uniformly applicable throughout the town. This is likely the case in Waterville Valley. The following examples of outdoor lighting regulations illustrate the range of detail and scope currently found among New Hampshire communities:

Peterborough: Peterborough is a town of approximately 6,000 people in Hillsborough County. Although relatively small, the Town has instituted detailed and comparatively complex lighting standards that prohibit all upward lighting and set differing maximum levels of outdoor illumination in commercial and village areas. Outdoor lighting provisions are provided in Peterborough's zoning ordinance and apply to all new development.

Raymond: The Town of Raymond in Rockingham County has a population of about 10,000 residents. The Town uses site plan review design standards that apply to all commercial and multi-family developments to regulate lighting, but do not apply the standards to single-family residences. The standards require the use of full-cutoff light fixtures, with no upward lighting allowed.

Shelburne: Shelburne is a town of 372 residents in Coos County. Shelburne provides an example of how a simple lighting ordinance might be implemented in Waterville Valley. Requirements for outdoor lighting in Shelburne are as follows: "All outdoor lighting shall be controlled to minimize the spillover of light onto adjacent properties. All outdoor area (nondecorative) lighting shall be aimed below the horizontal plane except for non-directional residential lighting such as porch, driveway and walkway lights." Although brief, this regulation addresses light trespass and preservation of dark skies without being needlessly complex.

For more information, see Case Study Summaries in Appendix



Lighting





OVERVIEW

The ideas and recommendations reflected in the Study can not be realized solely by the Town nor are they free. As noted earlier, the public is supportive of improving things, but they are also cautious about costs and how to pay for things. Waterville Valley is not a big town and, while its amenities and services sometimes rival that of much bigger communities, it has limitations that must be respected.

The Consultant Team has considered costs as it prepared its recommendations. While this over-arching study was not intended to drill down into detailed construction estimates, we do have guidance on costs.

COST RANGES

Low Cost / Near Term Improvements (\$2,000 -\$100,000)

- Install share the road signs and shared lane markings "sharrows" on a roadway
- Update crosswalks and new ADA compliant pedestrian ramps in an intersection
- Install Rectangular Rapid Flashing Beacons at a Crosswalk
- Construct a paved sidewalk without curb along a roadway

Moderate Cost / Mid term Improvements (\$100,000 -500,000)

- Construct a curbed sidewalk and required drainage along a roadway
- Install ornamental pedestrian scale lighting and landscaping along a roadway
- Construct a multi-use path off the side of a roadway

High Cost / Long Term Improvements (\$500,000 -1,000,000+)

 Construct a multi-use path including a river crossing pedestrian bridge, including permits and right-of-way impacts (Example: Valley Road path)

UNIT COSTS

This pricing is initially based on raw construction item costs, and then miscellaneous items and contingencies are added to arrive at realistic comprehensive development costs. It should be noted that these prices are only provided as a planning guide and actual costs will vary greatly due to site conditions. Items such as steep topography, utility conflicts, constrained right-of-way and natural resource constraints can add significantly to the costs.

Funding source and project procurement methods can also affect cost. If Federal funds are used the pricing can increase by as much **COST SUMMARY** as 50% due to federal oversight during design, permitting and construction. Conversely, if the Town uses its own equipment, materials and labor the costs will be lower.

Sidewalks and Paths

- 6' wide bituminous sidewalk
- 6' wide bituminous sidewalk with granite curbing
- 10' wide bituminous multi-use path (uncurbed)
- 10' wide prefabricated pedestrian bridge

Crosswalk enhancements

ADA compliant concrete pedestrian ramps with granite curb, cast iron detectable warning surface plates, improved durable crosswalk markings and crossing signs: \$6,000 / crossing

Solar Powered Rectangular Rapid Flashing Beacon (RRFB) installation: \$20,000 per crosswalk

Pedestrian Scale Street Lighting

Assumes 60' spacing on one side of the street with modest poles and fixtures. Also includes foundations, control panels, conduit, design and contingencies. \$400,000 / mile

The recommendations provided in this study cover a wide gamut of issues. The following matrix summarizes the range of costs and implementation issues associates with many of the recommendations related to pedestrian improvements (sidewalks, paths, crosswalks, bus stops, etc.). These have been broken down by roadway for convenience. This matrix also identified some "over-arching" projects to support branding and broader revitalization efforts.

\$100 / LF \$120 / LF \$2,000 / LF

\$60 / LF

This matrix also summarizes our recommendations on priorities. The "near-term" items are those suggested for development within the next 1-3 years and largely focus on addressing pressing needs or positioning the Town for future growth. Mid-term (4-8 year) items would require more preparation, financing and community input. Improvements in/ around Village Road are expected for the "long-term (8+ years) given the need to integrate any pedestrian system updates with future development options.

As the Town moves forward it should consider these costs in scoping and identifying priorities.



Implementation Strategies

COST MATRIX

Implementation Strategy/ Site Improvement	Quantity	Unit	Site Impro	vement Cost		Planning	Required	Implementation Timing			
			Low	High	Scoping	Environmental Review	Design and Construction	Cooperation/ Partnership	Near-Term (1-3 years)	Mid-Term (4-8 years)	Long-Term (8+ years)
GENERAL				1				1		1	1
Wayfinding and Signage Master Plan	1	EA	\$40,000	\$75,000			×	×	×		
Branding Summit	1	EA	NA	NA				×	×		1
Zoning Updates - Lighting/Signage/Parking	1	EA	\$4,000	\$10,000					×		
Developer "Summit"	1	EA	NA	NA				×	×		
VALLEY ROAD	•	1	•		•		1	•	•	•	
New Paved Multi-Use Path	5000	LF	\$500,000	\$700,000	×	×	×	×		×	
Snows Brook Crossing for Multi-Use Path	100	FT	\$95,000	\$200,000	×		×	×		×	
On-Road Sharrowing	4800	LF	\$4,000	\$6,000			×		×		
Pedestrian Scaled Lighting	5000	LF	\$300,000	\$400,000	×		×			×	
Bus Stop with Shelter/Paving/Benches/Bike and Ski Rack	2	EA	\$20,000	\$30,000	×		×			×	
Restriping Lanes on Valley Road	5000	LF	\$10,000	\$15,000	×		×		×		
BOULDER PATH ROAD							I			1	
New Multi-Use Path	2700	LF	\$270.000	\$380.000	×	×	×	×		×	
Pedestrian Scaled Lighting	2700	LF	\$150.000	\$200.000	×		×			×	
Bus Stop with Shelter/Paving/Benches/Bike and Ski Rack	2	EA	\$20.000	\$30.000	×		×	×		×	
Public Gravel Parking Area at Cascade Ridge Road	15	SPACES	\$10,000	\$15,000	×	×	×		×		
Striped Pedestrian Crossing (new at Snow's Brook)	1	FA	\$5,000	\$7,000	×		×		×		
On-Road Sharrowing	2700	LF	\$2,600	\$3,000			×		×		
	2,00		<i>\$2,000</i>	\$3,000		1		Į		Į	!
VILLAGE ROAD	1600	LE	\$80,000	\$100.000	*	*	×	[1	[×
On Street Parking (24 spaces)	550	LF	\$20,000	\$30,000	×		×				×
New Multi-Lise Path	750	LF	\$75,000	\$100,000	×	×	×	×			×
New Sidewalk (8')	2300	LF	\$150,000	\$200,000	×	*	×				×
Pedestrian Scaled Lighting	1600	LF	\$100,000	\$130,000	×		×				×
Bus Stop with Shelter/Paving/Benches/Bike and Ski Back	2	Εı	\$20,000	\$30,000	×		×	×		×	•••
Major Crossing /Speed Table at Town Square	1600	SE	\$15,000	\$30,000	×		*	**	*		
Stringd Dedectrian Crossing (new at Black Bear Way)	1000	FA	\$15,000	\$7,000	×		*		*		
On-Road Sharrowing	1600	IF	\$3,000	\$7,000			*		*		
Structured Parking Garage	200	SDACES	\$1,000	\$2,000	~	¥	*	*	**		×
	200	JFACL3	\$3,000,000	\$8,000,000	~	~	~	~			~
SNOWS BROOK ROAD	1000	1 15	\$50,000	\$70,000	~	×	*	1	*	I	1
Podestrian Scaled Lighting	1700	10	\$30,000	\$140,000	~		*		**		×
Pue Stop with Shalter/Daving/Ponches/Dike and Ski Pack	2	EA	\$110,000	\$140,000	~		*	~		~	~
Striped Redestrian Crossing (new at Snew's Break)	1	EA	\$20,000	\$30,000	~		*	~	*	~	
On Road Sharrowing	1700		\$3,000	\$1,000	~		*		*		
	1700	LI	\$1,000	\$1,500		1	~	L	~		
PACKARD'S ROAD	1	EA	\$10,000	\$20,000	~	T	*	×		~	1
Podostrian Scaled Lighting	1200		\$10,000	\$20,000	~		*	~		~	*
Ctriped Redestrian Crossing (1 new at Technicab (Spows Brook)	1200	EA	\$72,000	\$30,000	~		*		*		~
On Read Sharrowing	1200		\$3,000	\$7,000	~		~	ł	~	ł	
	1200		\$1,200	\$1,400		1	~	I	~	I	I
IECUMSEH ROAD	1200	1.5	\$120,000	¢150.000	~	~	~	Γ	[~	1
On Read Sharrowing	1300		\$130,000	\$150,000	~	~	~		~	~	
	1300	LF	\$1,300	\$1,500			~		~		
SNOW BROOK TRAIL AND VICINITY	C00	15	¢20.000	¢20.000	~	~	<i></i>	~		~	
New mornal Path from Packarus koad to Shows Brook via Golden Eagle	600	LF	\$20,000	\$30,000	*	*	*	*		*	
New Crossing (Bridge)	50		\$50,000	\$80,000	×	× ~	× ~	× ~		×	
		F	\$50,000	300,000	~	~	~	×		~	
Upgrade Conference Center Trail/resurface/handrails, wooden stairs	1	EA	\$25,000	\$50,000	×	×	×	×		×	

FUNDING OPTIONS

It is hoped that a major outcome of this study is that the Town will begin to pursue options for funding outside of its local contribution. Although "going on your own" has benefits by avoiding state or federal project requirements, the ability of municipalities to leverage outside resources could help the community address some of the bigger ticket items identified in the Study.

Some of the possible grant programs that various improvements might target include:

htm

• New Hampshire Bicycle and Pedestrian Grant from the Foundation for Healthy Communities http://www.healnh.org/ images/pdffiles/grant-program-announcement.doc

- program.aspx
- aspx?pid=606



• Transportation Alternatives Program (TAP) grants http:// www.nh.gov/dot/org/projectdevelopment/planning/tap/index.

• Recreational Trails Program http://www.nhstateparks.org/ partner-and-community-resources/grants/recreational-trails-

• Safe Routes to School http://www.nh.gov/dot/org/ projectdevelopment/planning/srts/

• NH Charitable Foundation Grants http://www.nhcf.org/page.

• USDA Rural Development Community Facilities Grants http://www.rurdev.usda.gov/HAD-CF_Grants.html

• Land & Water Conservation Fund Grants http://www. nhstateparks.org/partner-and-community-resources/grants/ land-and-water-conservation-fund-grant.aspx

• Federal Transit Administration (FTA) Grants -http://www.fta. dot.gov/grants/13093_3555.html



Moving Forward



Where do we go from here?

While the breadth and scope of the recommendations outline in this Study can be overwhelming, the Consulting Team believes the first steps are:

Get everyone on the same team

- Unify around a common vision and collaborate as partners towards the common goal hold workshops on the Future of the Town Core.
- Form a Town Core Working Group comprised of public and private interests to explore opportunities. Address all issues on the table; density, accessibility, parking, use.
- Harness community energy and volunteer efforts to move Waterville Valley forward.

Build momentum

- Before major capital is invested, the Town should take some small steps and build momentum and measure results. These small steps include:
- » Branding Bring together all parties to a "What is the Waterville Brand" Summit;
- Marketing/communication with the community keep resident and visitor engagement going have another Annual Picnic,
- Explore grant opportunities that align with specific ideas, and
- » Work with and identify new partners make sure visitors and guests are part of the thinking.

Continue Due Diligence

- This Study is not the end of planning. There is more due diligence work to be done. Specific studies will help access future opportunities:
 - » Review ideas for improvement and begin scoping of more complex projects;
 - Explore options for public-private partnerships; developer agreements, joint-development authorities;
 - » Move forward with a Wayfinding and Signage Master Plan after branding discussions, and
 - » Explore and study zoning changes and perhaps update the Town Master Plan.
- Conduct regular surveys (Town, Waterville Resort, Waterville Resort Association) of the market to better poll visitor need. Keep asking what people want.

Take Incremental Opportunities

The Study presents a range of opportunities to make incremental improvements to increase the Town's pedestrian orientation. Some of these are low-cost and can be done guickly. Establishing some forward momentum and progress towards the recommendations of this study can help build broader community support and act as leverage in the pursuit of future grant and funding opportunities.



TOWN OF WATERVILLE VALLEY **NEW HAMPSHIRE** PEDESTRIAN VILLAGE REVITALIZATION STUDY