



Town of Beacon Falls

August 3, 2020
Town Meeting

Debt Presentation

Proposed New Capital Projects

Total
Proposed
Debt
Issue

\$5,000,000 – Roads & Drainage Improvements

\$1,000,000 – Wastewater Treatment Plant

\$6,000,000 – Total Proposed Capital Projects

Amount Determination & Process

You might be asking yourself right about now:

*How did the Town determine these \$ amounts,
what was the process, and which roads are
getting paved?*

BAN/Bond Authorization Process

1. **Over the years**, the Town has worked with various consulting engineers who have advised on infrastructure maintenance/replacement schedules and projected costs, which has assisted with short & long-term capital planning.
2. **April/May 2019**: the Town hired StreetScan to evaluate all 30 miles of road and produce a pavement maintenance study with priority orders.
3. **September 2019**: the Town met with its Wastewater engineer to discuss updates to the plant's capital plan, which had transformed since its inception in 2014.
4. **October 2019**: Town met with its financial advisor and bond council to discuss infrastructure needs and its current financial status and borrowing capacity
5. **January 2020**: Financial advisor drafted a BAN/bonding scenario based on the Town's engineers, data from software, staff input, and what was feasible in a 2-3 year period. Interest rates and the Town's rating were analyzed to come up with a 20-year borrowing principal and interest schedule for the \$6M and how it would interplay with the Town's existing debt (2014 and 2016 debt issues).
6. **February 2020**: Town worked with Bond Counsel to draft BAN/Bond authorization documents that would need to be presented and voted on by BOS, BOF, WPCA and P&Z first.
7. **Meetings (Mar-May 2020)**: BOF met and voted yes on **3/10**; BOS met & voted yes on **3/18**; P&Z met & voted yes on **4/23**; WPCA held its hearing and voted yes on **5/5**
8. **May-July 2020**: Delays due to COVID.
9. **8/3/20: Town Meeting** - final step to authorize the \$6M debt issue.

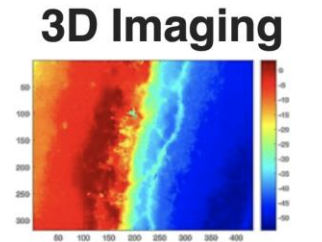
\$5M – Roads & Drainage Improvements

StreetScan Details

On May 2, 2019, the Town of Beacon Falls contracted with StreetScan (procured through the CT Conference of Municipalities) to perform an evaluation of the condition of its streets. All 30 miles were evaluated, and a summary report was created.

Data Collection

ScanVan Data Collection



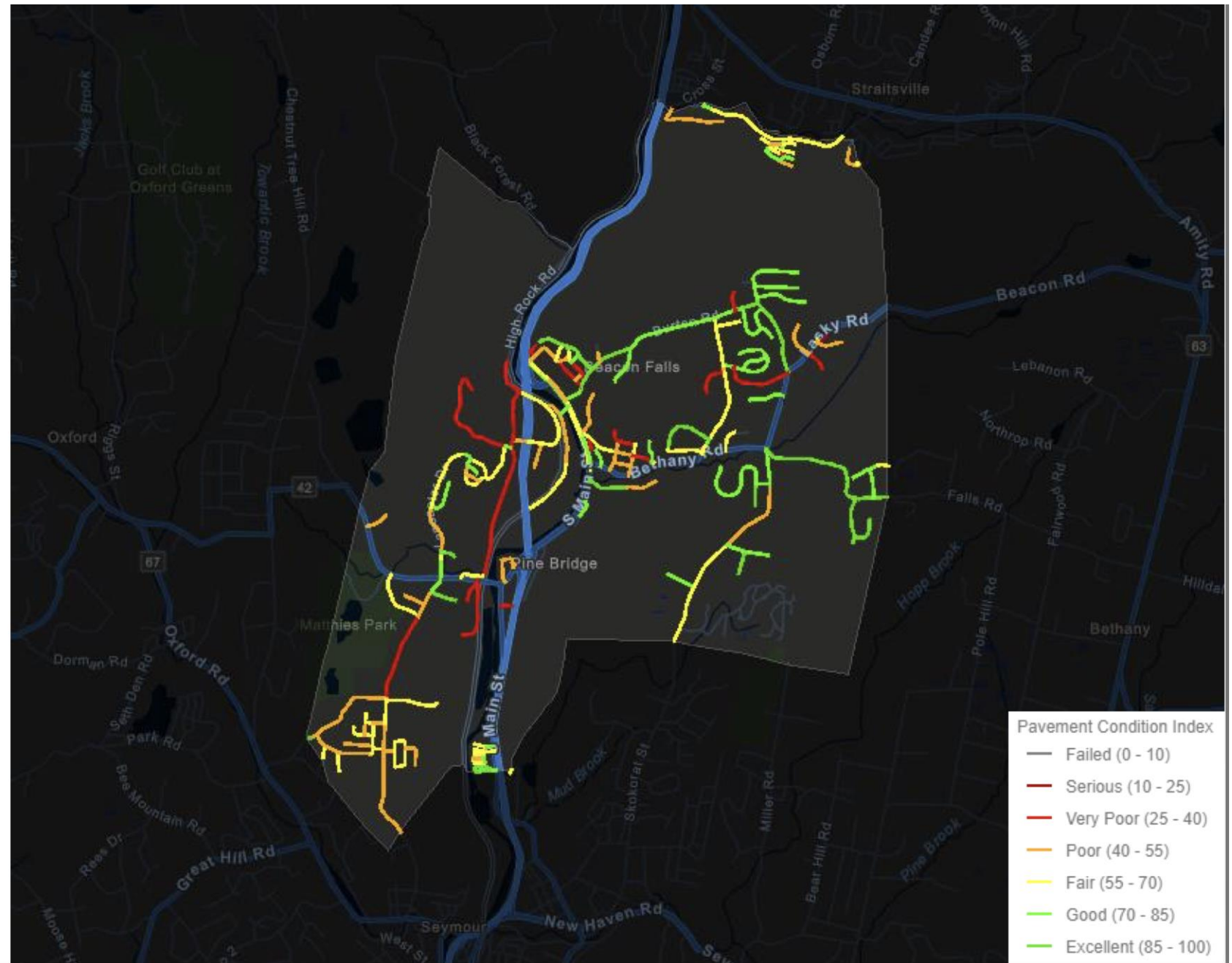
PCI Explained

STREETSCAN Pavement Condition Index (PCI)



ASTM, D6433-11. (2011). "Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys."

Pavement Condition Index (PCI)



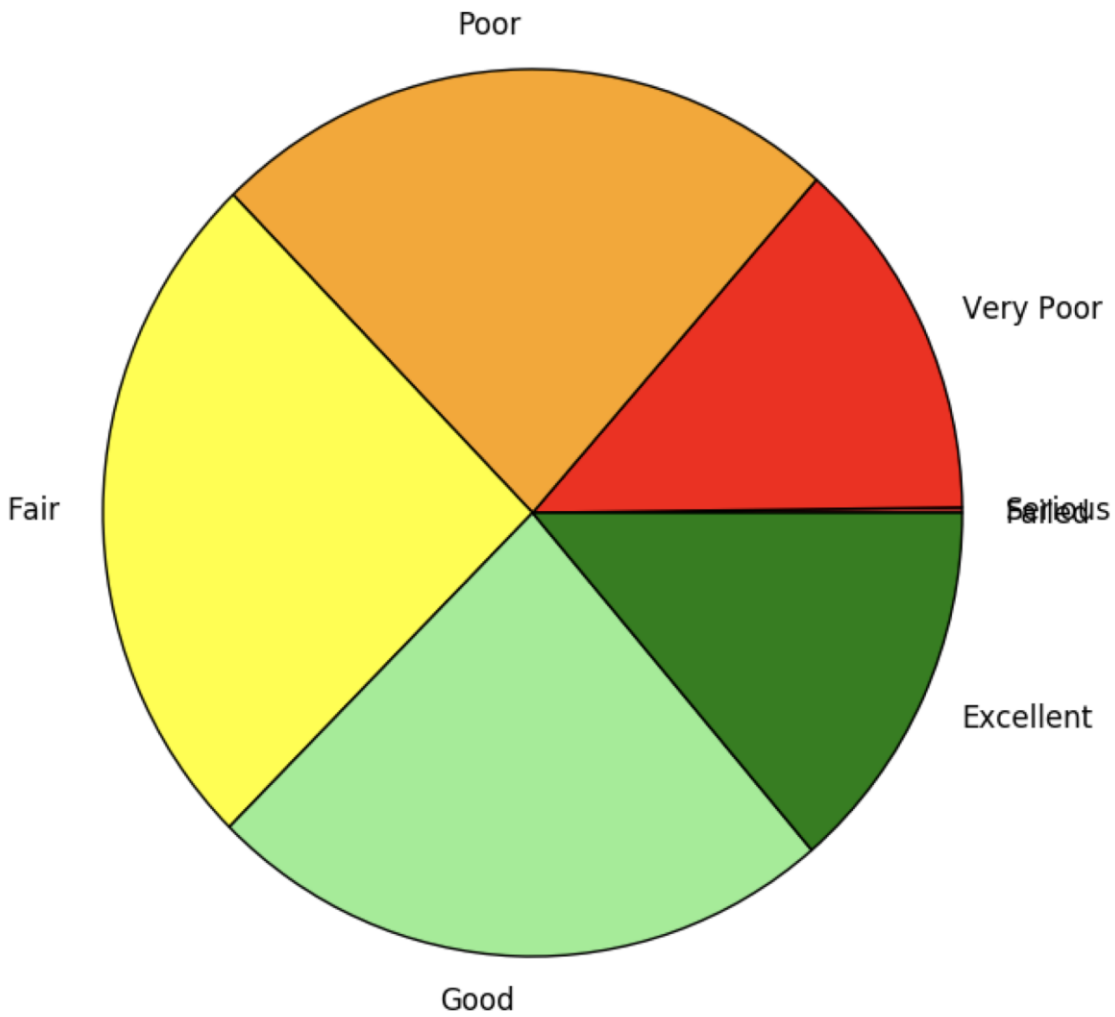
Breakdown by Miles and Number of Segments

PCI Range	0 – 10	11 - 25	26 - 40	41 - 55	56 - 70	71 - 85	86 - 100	TOTAL
Centerline Miles	0	0.1	3.8	6.7	7.2	6.7	3.9	28.4
Segments	0	1	21	56	75	66	28	247
Percentage	0%	0.2%	13.3%	23.8%	25.3%	23.7%	13.7%	100%

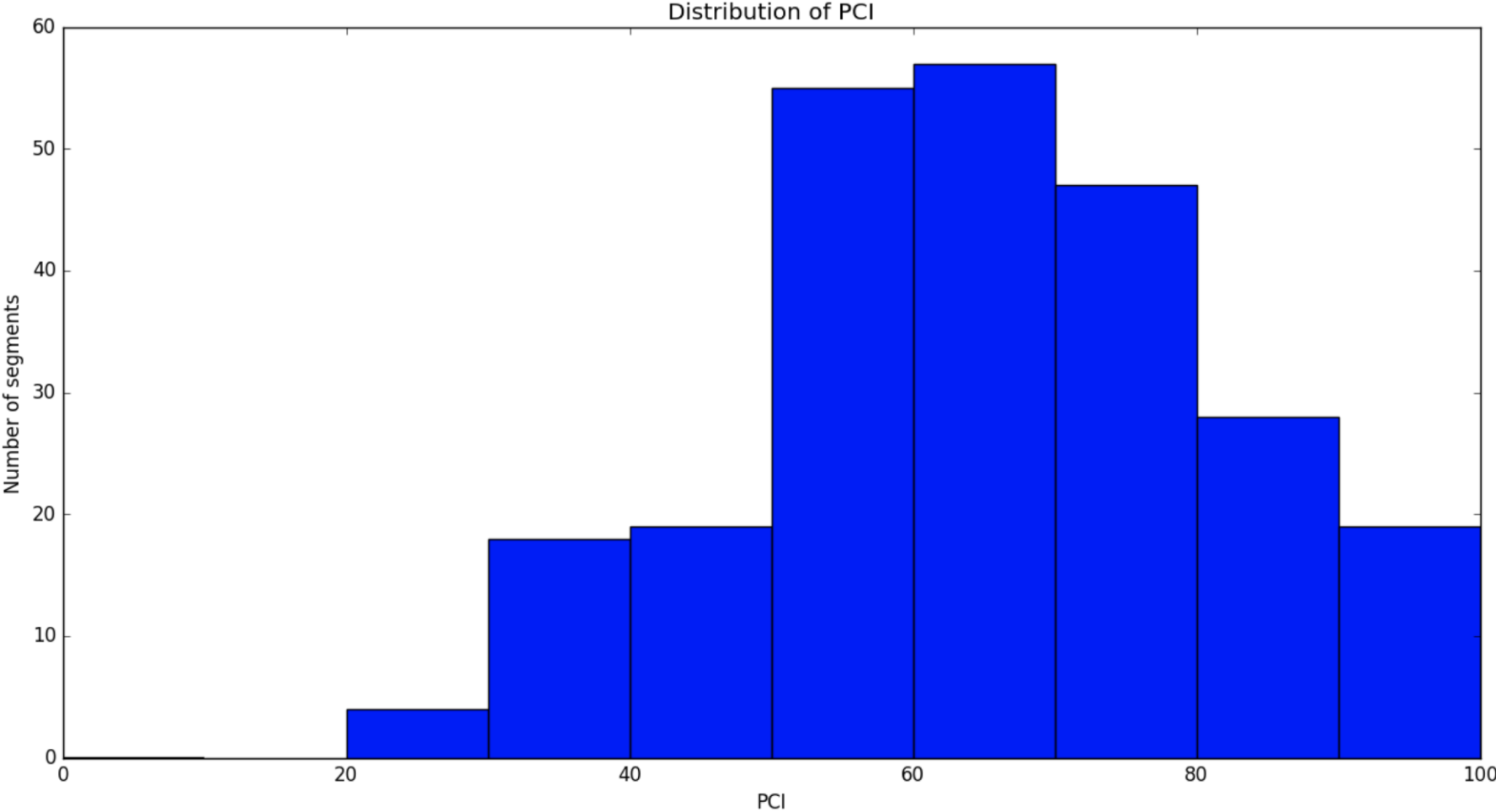
Roads Condition Statistics

Average Condition	64.0
% below Critical Condition (55)	37.3%
% above Critical Condition (55)	62.7%

PCI Distribution by category

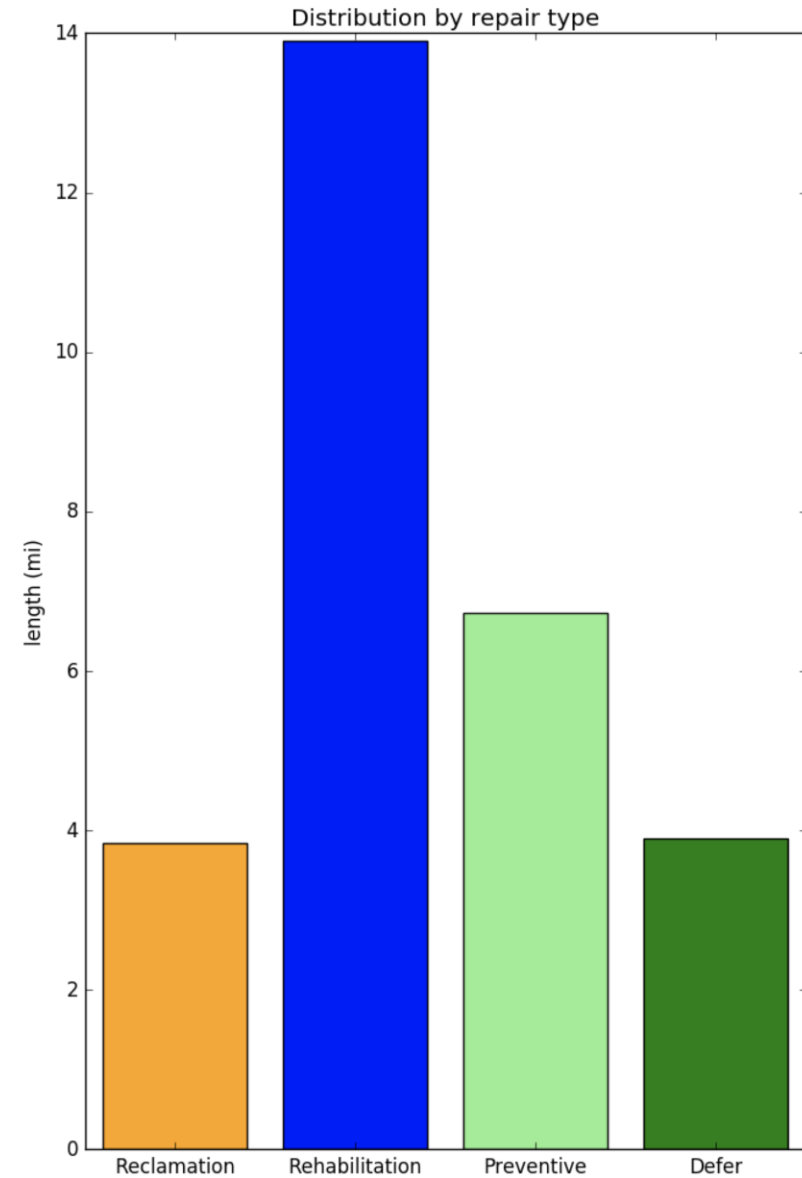


Distribution of Pavement Condition Index

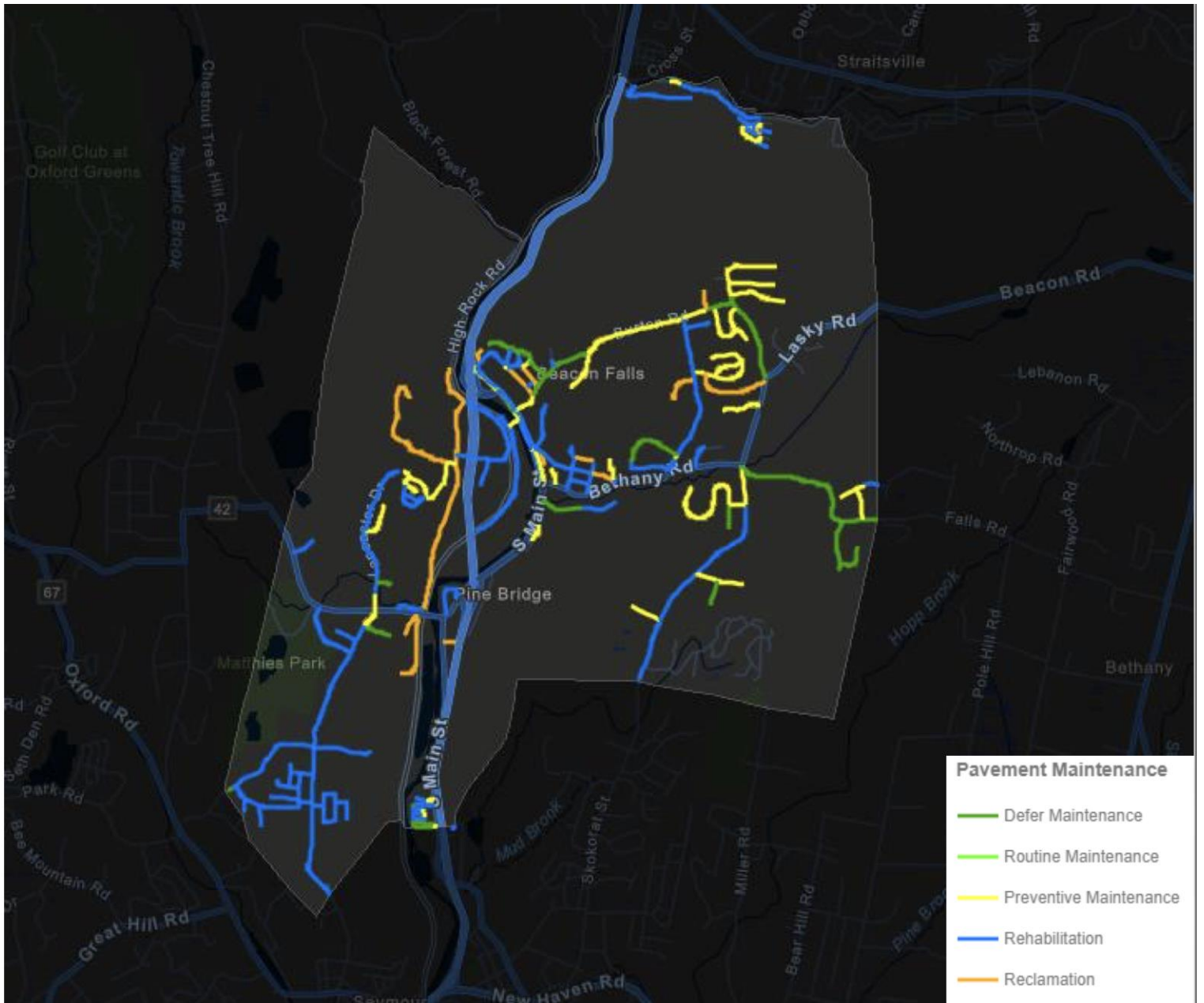


Maintenance and Repair Statistics

PCI Range	Category	Description	Examples
< 40	Reconstruction	Significant structural damage	Reclamation, Major Mill and Overlay > 4"
40 – 70	Rehabilitation	Resurfacing required to mitigate the effects of rutting, cracking and other distresses	Hot-mix overlay, Mill & Overlay, Hot-in-place Recycling
70 – 85	Preventive Repair	Minor distresses in early stages of pavements' life-cycle	Crack Seal, Microsurfacing, Chip Seal
> 85	Defer Maintenance	Pavement in a great condition	NA



Pavement Maintenance and Repair



It's no secret, Beacon Falls roads need a lot of work! But now the Town has a data-driven interactive tool (StreetLogix) to help it (and its Engineers) to make informed decisions about the priority order of the streets to be paved/reconstructed.

TENTATIVE First Selectman Road Paving & Bridge Plan

Calendar Year	Road Name (in alpha order)	Total ESTIMATED Cost
2020 (Fall/Spring/Summer)	<ul style="list-style-type: none"> • Columbine Lane • Hillside Drive • Jane Street • Ladyslipper Drive • Randall Drive • Stoddard Place 	\$925,000
2021 (Fall/Spring/Summer)	<ul style="list-style-type: none"> • Beacon Valley Road • Beacon Valley Road Bridge • Coventry Lane • Dolly Drive • Patricia Terrace 	\$1,700,000 + STEAP grant funding + LOTCIP grant funding
2022 (Fall/Spring/Summer)	<ul style="list-style-type: none"> • Briarwood Drive • Cedar Lane • Cedar Circle • Cook Lane • Diana Lane • Rimmon Hill Road • West Road 	\$1,550,000 + LOTCIP grant funding
2023 (Fall/Spring/Summer)	<ul style="list-style-type: none"> • Avenues B, C, D and E • Avenue E Extension • Edgewood Drive • Feldspar Avenue 	\$825,000

Where Did the Road/Bridge Plan Originate From?

The First Selectman's road paving plan was based on a combination of **6 things**:

- 1) StreetLogix (portal that houses StreetScan road data)
- 2) On-Call Engineers' expert opinions
- 3) Public Works Department's input
- 4) Network completion (geography)
- 5) Availability of grant funding & being sensitive to taxpayer's ability to pay
- 6) Bandwidth and timing

StreetLogix Priority Order Results

Roads in 2020 Plan

Street Name	From	To	PCI	Length (ft)	Maintenance Suggestion	Estimated Materials/Labor Cost (\$)	Repair Priority	Area (sy)
Columbine Lane	Lady Slipper Dr	Dead End	57	518	Rehabilitation	\$34,504.00	59.72	1382
Hillside Dr	Snyder Dr	Wilson Ct	54	413	Rehabilitation	\$27,480.00	63.89	1100
Hillside Dr	Wilson Ct	Arlene Ct	50	1055	Rehabilitation	\$70,296.00	69.44	2815
Hillside Dr	West Rd	Snyder Dr	51	497	Rehabilitation	\$33,110.00	68.06	1326
Jane St	Rimmon Hill Rd	Stoddard Pl	50	346	Rehabilitation	\$23,034.00	69.44	922
Lady Slipper Dr	Stoddard Pl	Columbine Ln	51	335	Rehabilitation	\$22,336.00	68.06	894
Randall Dr	Arlene Ct	Rimmon Hill Rd	57	363	Rehabilitation	\$24,193.00	59.72	969
Stoddard Pl	Stoddard Pl	Stoddard Pl	58	2218	Rehabilitation	\$147,708.00	58.33	5914

StreetLogix Priority Order Results

Roads in 2021 Plan

Street Name	From	To	PCI	Length (ft)	Maintenance Suggestion	Estimated Materials/Labor Cost (\$)	Repair Priority	Area (sy)
Beacon Valley Rd	Beacon Hill Cmn	Town Line	60	2007	Rehabilitation	\$133,644.00	55.56	5351
Beacon Valley Rd	Cambridge Ct	Beacon Hill Cmn	58	668	Rehabilitation	\$44,470.00	58.33	1781
Beacon Valley Rd	Cotton Hollow Rd	245' SE of Cotton Hollow Rd	80	246	Preventive Maintenance	\$655.00	27.78	655
Beacon Valley Rd	245' SE of Cotton Hollow Rd	Cambridge Ct	59	1865	Rehabilitation	\$124,221.00	56.94	4974
Beacon Valley Rd 2	Beacon Valley Rd	Town Line (Naugatuck)	62	65	Rehabilitation	\$4,347.00	52.78	174
Dolly Dr	Country Ct	Dead End	52	723	Rehabilitation	\$48,178.00	66.67	1929
Dolly Dr	Lasky Rd	Country Ct	47	105	Rehabilitation	\$7,013.00	73.61	281
Patricia Ter	Lasky Rd	Dead End	28	680	Reconstruction	\$181,253.00	100.00	1814
Coventry Ln	Lasky Rd	Dead End	50	1102	Rehabilitation	\$73,366.00	69.44	2938

StreetLogix Priority Order Results

Roads in 2022 Plan (1 of 2)

Street Name	From	To	PCI	Length (ft)	Maintenance Suggestion	Estimated Materials/Labor Cost (\$)	Repair Priority	Area (sy)
Briarwood Dr	Rimmon Hill Rd	Dead End	58	1650	Rehabilitation	\$109,918.00	58.33	4401
Cedar Ln	Oak Dr	Cedar Cir	82	315	Defer Maintenance	\$0.00	25.00	841
Cedar Ln	Cedar Cir	Cedar Cir	71	1107	Preventive Maintenance	\$2,950.00	40.28	2953
Cedar Ln	Cedar Cir	Dead End	80	992	Preventive Maintenance	\$2,642.00	27.78	2645
Cedar Ln	Cook Ln	Oak Dr	79	337	Preventive Maintenance	\$898.00	29.17	899
Cook Ln	130ft SW of Donna St	Donna St	78	134	Preventive Maintenance	\$357.00	30.56	358
Cook Ln	Donna St	Bethany Rd	64	50	Preventive Maintenance	\$134.00	50.00	134
Cook Ln	Diana Ln	Cedar Ln	60	1278	Rehabilitation	\$85,147.00	55.56	3409
Cook Ln	Donna St	130ft NE of Donna St	68	340	Preventive Maintenance	\$907.00	44.44	908
Cook Ln	Sharon Dr	Donna St	65	2336	Preventive Maintenance	\$6,224.00	48.61	6230
Cook Ln	Cedar Ln	Sharon Dr	53	216	Rehabilitation	\$14,376.00	65.28	576
Cook Ln	Burton Rd	Diana Ln	66	266	Preventive Maintenance	\$709.00	47.22	710
Diana Ln	Cook Ln	Dead End	66	761	Preventive Maintenance	\$2,027.00	47.22	2029

StreetLogix Priority Order Results

Roads in 2022 Plan (2 of 2)

Street Name	From	To	PCI	Length (ft)	Maintenance Suggestion	Estimated Materials/Labor Cost (\$)	Repair Priority	Area (sy)
Rimmon Hill Rd	White Birch Ln	Fawn Hill Rd	52	500	Rehabilitation	\$33,277.00	66.67	1332
Rimmon Hill Rd	Back Rimmon Rd	White Birch Ln	53	400	Rehabilitation	\$26,624.00	65.28	1066
Rimmon Hill Rd	Jones Dr	Briarwood Dr	60	727	Rehabilitation	\$48,403.00	55.56	1938
Rimmon Hill Rd	Randall Dr	Jones Dr	54	824	Rehabilitation	\$54,906.00	63.89	2198
Rimmon Hill Rd	Fawn Hill Rd	Pinesbridge Rd	76	521	Preventive Maintenance	\$1,388.00	33.33	1389
Rimmon Hill Rd	West Rd	Back Rimmon Rd	40	2869	Reconstruction	\$764,300.00	83.33	7651
Rimmon Hill Rd	Randall Dr	Jane St	50	66	Rehabilitation	\$4,420.00	69.44	177
Rimmon Hill Rd	West Rd	Briarwood Dr	63	62	Preventive Maintenance	\$165.00	51.39	165
Rimmon Hill Rd	Jane St	Townline	48	2831	Rehabilitation	\$188,533.00	72.22	7549
West Rd	105ft SW of Hillside Dr	Rimmon Hill Rd	48	2877	Rehabilitation	\$191,578.00	72.22	7671
West Rd	105ft SW of Hillside Dr	Town Line	100	170	Defer Maintenance	\$0.00	0.00	454

StreetLogix Priority Order Results

Roads in 2023 Plan

Street Name	From	To	PCI	Length (ft)	Maintenance Suggestion	Estimated Materials/Labor Cost (\$)	Repair Priority	Area (sy)
Avenue B	Avenue E	Avenue C	50	564	Rehabilitation	\$37,588.00	69.44	1505
Avenue C	Feldspar Ave	Avenue D	60	346	Rehabilitation	\$23,036.00	55.56	922
Avenue C	Avenue B	Feldspar Ave	46	346	Rehabilitation	\$23,013.00	75.00	921
Avenue C	Bethany Rd	Avenue B	50	307	Rehabilitation	\$20,413.00	69.44	817
Avenue D	Avenue E	Avenue C	35	558	Reconstruction	\$148,533.00	90.28	1487
Avenue E	Avenue B	Feldspar Ave	50	338	Rehabilitation	\$22,500.00	69.44	901
Avenue E	Feldspar Ave	Avenue D	50	344	Rehabilitation	\$22,886.00	69.44	916
Avenue E	Bethany Rd	Avenue B	49	264	Rehabilitation	\$17,574.00	70.83	704
Avenue E Ext	Avenue D	Dead End	40	376	Reconstruction	\$100,207.00	83.33	1003
Edgewood Dr	Feldspar Ave	Dead End	73	637	Preventive Maintenance	\$1,696.00	37.50	1698
Feldspar Ave	Avenue E	Avenue C	42	556	Reconstruction	\$148,055.00	80.56	1482
Feldspar Ave	Avenue C	Edgewood Dr	38	630	Reconstruction	\$167,947.00	86.11	1681
Feldspar Ave	Johnson St	Avenue E	58	1043	Rehabilitation	\$69,482.00	58.33	2782
Feldspar Ave	Edgewood Dr	Bethany Rd	62	99	Rehabilitation	\$6,624.00	52.78	265
Feldspar Ave	S Main St S	Johnson St	66	300	Preventive Maintenance	\$800.00	47.22	801

Please keep in mind that the road paving and bridge plan listed above are merely the large infrastructure projects. The Public Works Department will continue to make small repairs/patches (preventative maintenance) as necessary on the roads not listed in the plan with operational highway materials monies from the General Fund as it does annually.

\$1M – Wastewater Treatment Plant

\$1M for Required Electrical Upgrades

Unit Process	Estimated Cost (Includes Construction, Construction Support & Contingency)	WPCF Upgrades	
		Phase I - Current Project	Phase II - Future Project
Influent Pumping Station	\$ 640,000	\$ -	\$ 640,000
Headworks-Screening	\$ 1,160,000	\$ -	\$ 1,160,000
Headworks-Grit Removal	\$ 970,000	\$ -	\$ 970,000
Primary Clarifier Conversion Upgrades	\$ 710,000	\$ -	\$ 710,000
Aeration Basin Upgrades	\$ 1,050,000	\$ -	\$ 1,050,000
Aeration System Analyzers	\$ 140,000	\$ -	\$ 140,000
Existing Gravity Thickener Conversion Upgrades	\$ 450,000	\$ -	\$ 450,000
Rectangular Clarifier Conversion Upgrades	\$ 1,400,000	\$ -	\$ 1,400,000
Circular Secondary Clarifier Dbox and Scumwell	\$ 370,000	\$ 370,000	\$ -
New Circular Secondary Clarifiers	\$ 3,240,000	\$ 3,240,000	\$ -
RAS Pumps	\$ 600,000	\$ 600,000	\$ -
Nitrate Recycle Pumps	\$ 530,000	\$ -	\$ 530,000
WAS/TWAS Pumps	\$ 540,000	\$ -	\$ 540,000
Rotary Drum Thickener	\$ 980,000	\$ -	\$ 980,000
WAS Storage Tank Modifications	\$ 170,000	\$ -	\$ 170,000
TWAS Storage Tank Modifications	\$ 30,000	\$ 30,000	\$ -
Main Building Roof Replacement	\$ 140,000	\$ -	\$ 140,000
Pavement	\$ 240,000	\$ -	\$ 240,000
Main Electrical System	\$ 560,000	\$ 560,000	\$ -
Emergency Generator	\$ 350,000	\$ 350,000	\$ -
Total (September 2019) =	\$14,270,000	\$5,150,000	\$9,120,000

\$910,000 +
unforeseen/
engineering
costs

Let's get back to the money portion of the discussion! What does it mean for the Town over the next 20 years by voting to approve this debt issue today?



Total
Proposed
Debt Issue



\$6M = \$5M for Roads & Drainage +
\$1M for WWTP Electrical

Standard & Poor's versus Moody's Rating Categories

Highest	AAA	Aaa
	AA+	Aa1
	AA ←	Aa2
	AA-	Aa3
	A+	A1
	A	A2
	A-	A3
	BBB+	Baa1
	BBB	Baa2
Lowest	BBB-	Baa3

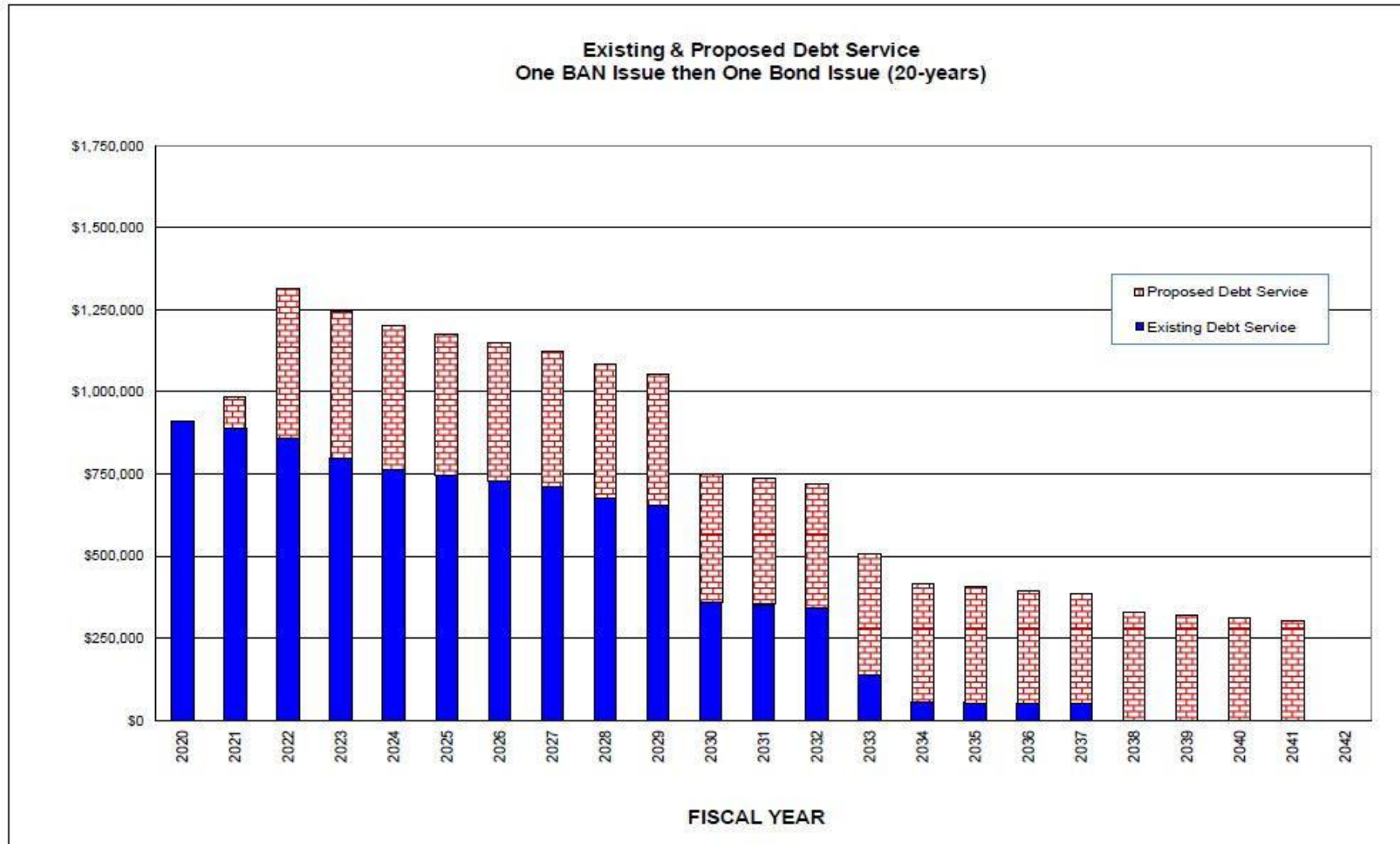
Town of Beacon Falls

The Town has assurance from its financial advisor that the new debt issue would not bring down its AA rating due to the numerous factors that calculate a rating.

Existing & Proposed Annual Debt Service

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(N)
					==> Proposed Debt Service							
	<u>Existing Debt Service</u>				\$6,000,000 BANs	\$6,000,000 Bonds Dated Nov 2020 2.75% with - 20 yr. Term						Possible Use of Projected
Fiscal Year	Principal	Interest	Total Existing Debt Service	Annual Change	Dated May 2020 Due Dec 2020	Principal	Interest	Total	Total Proposed Debt Service	Total Existing & Proposed Debt	Annual Change	Bond Premium or Fund Balance
2020	690,000	220,208	910,208		-	-	-	-	-	966,000		-
2021	690,000	198,933	888,933	(21,275)	15,000	-	79,500	79,500	94,500	983,433	17,433	-
2022	680,000	177,481	857,481	(31,451)	-	300,000	155,025	455,025	455,025	1,312,506	329,074	(250,000)
2023	640,000	157,681	797,681	(59,800)	-	300,000	147,075	447,075	447,075	1,244,756	(67,750)	-
2024	625,000	138,481	763,481	(34,200)	-	300,000	139,125	439,125	439,125	1,202,606	(42,150)	-
2025	625,000	121,031	746,031	(17,450)	-	300,000	131,175	431,175	431,175	1,177,206	(25,400)	-
2026	625,000	103,969	728,969	(17,063)	-	300,000	123,225	423,225	423,225	1,152,194	(25,013)	-
2027	625,000	85,994	710,994	(17,975)	-	300,000	115,275	415,275	415,275	1,126,269	(25,925)	-
2028	610,000	67,663	677,663	(33,331)	-	300,000	107,325	407,325	407,325	1,084,988	(41,281)	-
2029	605,000	49,163	654,163	(23,500)	-	300,000	99,375	399,375	399,375	1,053,538	(31,450)	-
2030	330,000	30,850	360,850	(293,313)	-	300,000	91,425	391,425	391,425	752,275	(301,263)	-
2031	330,000	22,850	352,850	(8,000)	-	300,000	83,475	383,475	383,475	736,325	(15,950)	-
2032	330,000	14,650	344,650	(8,200)	-	300,000	75,525	375,525	375,525	720,175	(16,150)	-
2033	130,000	8,419	138,419	(206,231)	-	300,000	67,575	367,575	367,575	505,994	(214,181)	-
2034	50,000	4,125	54,125	(84,294)	-	300,000	59,625	359,625	359,625	413,750	(92,244)	-
2035	50,000	2,969	52,969	(1,156)	-	300,000	51,675	351,675	351,675	404,644	(9,106)	-
2036	50,000	1,781	51,781	(1,188)	-	300,000	43,725	343,725	343,725	395,506	(9,138)	-
2037	50,000	594	50,594	(1,188)	-	300,000	35,775	335,775	335,775	386,369	(9,138)	-
2038	-	-	-	(50,594)	-	300,000	27,825	327,825	327,825	327,825	(56,544)	-
2039	-	-	-	-	-	300,000	19,875	319,875	319,875	319,875	(7,950)	-
2040	-	-	-	-	-	300,000	11,925	311,925	311,925	311,925	(7,950)	-
2041	-	-	-	-	-	300,000	3,975	303,975	303,975	303,975	(7,950)	-
2042	-	-	-	-	-	-	-	-	-	-	(303,975)	-
2043	-	-	-	-	-	-	-	-	-	-	-	-
2044	-	-	-	-	-	-	-	-	-	-	-	-
2045	-	-	-	-	-	-	-	-	-	-	-	-
Totals	7,735,000	987,700	9,141,841		15,000	6,000,000	1,669,500	7,669,500	7,684,500	16,882,133		

Existing & Proposed Annual Debt Service



You might be saying:

This information is great but what does this mean for the mill rate in the upcoming years and what effect will voting “yes” for this debt issue have on my taxes?

Mill Rate

- Beacon Falls is one of very few towns/cities in the State of CT that has maintained a flat mill rate (35.90) for 4 consecutive years.
- Currently, the Town is on the 2019 Grand List Year, which values the Town's real estate at \$490,397,473. This reflects the BAA adjustment.

*THEREFORE, the current value of 1 mill =
\$490,397*

Mill rate/Tax Implications of \$6M 20-Year Debt Issue

FY	Annual Change	Annual Change Amount	Mill Rate Effect (assuming no change to services, collection rate OR grand list)
2021	Decrease	\$17,433	None
2022	Decrease	\$329,074 (incl. \$250k bond prem.)	None
2023	Increase	\$67,750	0.14 increase
2024	Increase	\$42,150	0.09 increase
2025	Increase	\$25,400	0.05 increase
2026	Increase	\$25,925	0.05 increase
2027	Increase	\$41,281	0.08 increase
2028	Increase	\$31,450	0.06 increase
2029	Increase	\$301,263	0.61 increase
2030	Increase	\$15,950	0.03 increase
2031	Increase	\$16,150	0.03 increase

Mill rate/Tax Implications of \$6M 20-Year Debt Issue

FY	Annual Change	Annual Change Amount	Mill Rate Effect (assuming no change to services, collection rate OR grand list)
2032	Increase	\$16,150	0.03 increase
2033	Increase	\$214,181	0.44 increase
2034	Increase	\$92,244	0.19 increase
2035	Increase	\$9,106	0.02 increase
2036	Increase	\$9,138	0.02 increase
2037	Increase	\$9,138	0.02 increase
2038	Increase	\$58,544	0.12 increase
2039	Increase	\$7,950	0.02 increase
2040	Increase	\$7,950	0.02 increase
2041	Increase	\$7,950	0.02 increase
2042	Increase	\$303,975	0.62 increase

Interest Rates

- Please recall that the above debt schedule and mill-rate increase projections are based on the debt being issued at 2.75%. Due to the current market, these will likely decrease due to rates being in our favor right now. We won't get our established rate until we officially issue the debt following the town meeting.

You might be saying:

This information is great but I want to know how these mill rate increases translate to my tax bill. I.e. what is the estimated additional tax I will be paying based on the value of my home?

Tax Bill Examples to Demonstrate Mill Rate Increases

Example 1:

Home Market Value: \$490,000

70% Assessed Value: \$343,000*

2020 Taxes (35.90 Mill Rate): \$12,313

2023 (35.90+0.14=36.04): \$12,362

Total increase in taxes: \$49

2029 (35.90+1.13=37.03): \$12,701

Total increase in taxes: \$388

Example 2:

Home Market Value: \$250,000

70% Assessed Value: \$175,000*

2020 Taxes (35.90 Mill Rate): \$6,282

2023 (35.90+0.14=36.04): \$6,307

Total increase in taxes: \$25

2029 (35.90+1.13=37.03): \$6,480

Total increase in taxes: \$198

Discussion

Any questions or statements from the public?