

Proposed \$25 Million Road Repair Bond



Prepared by: Christopher Fava
August 24, 2016

Proposed Article

To see if the Town will vote to raise and appropriate, transfer from available funds, borrow, or otherwise fund \$25,000,000.00 in improvements to Public and Unaccepted Roads including all costs necessary and related to the following:

- Resurfacing
- Crack Sealing
- Aggregate/ or Recycled Pavement
- Drainage (including engineering expenses related to water road runoff management)
- Pavement Markings
- Guardrails
- Sidewalks
- Street Lighting
- Traffic Control (including signage)
- Berms and Curbs
- Right of Way Acquisition
- Bicycle Lanes/Paths
- Bridges
- Tree planting/Landscaping associated with the project

Or take any other action relative thereto...



Problems with Bad Roads

- ❑ Decreases public safety
- ❑ Roads become more difficult to use
- ❑ May cause cars to inadvertently swerve
- ❑ Increases accident rates
- ❑ Raises Vehicle operating costs
- ❑ May cause sections of the road to fail
- ❑ Causes flooding, erosion and drainage problems
- ❑ Increases overall road repair costs



Road Repairs by Category

Currently the Town of Plymouth has **241.7** miles of public & unaccepted roads that need immediate repairs, rehabilitation, or maintenance with an estimated cost of **\$134,456,390**. This does not include repairs to sidewalks, bike paths, or ramps.

Repair Method	Length (mi)	Est. Cost
<i>Reconstruction</i>	74.6	\$ 96,466,970
<i>Rehabilitation</i>	90.2	\$ 27,703,560
<i>Preservation</i>	47.3	\$ 9,883,760
<i>Maintenance</i>	29.6	\$ 402,200
Totals	241.7	\$ 134,456,390

Current Roadway Budget



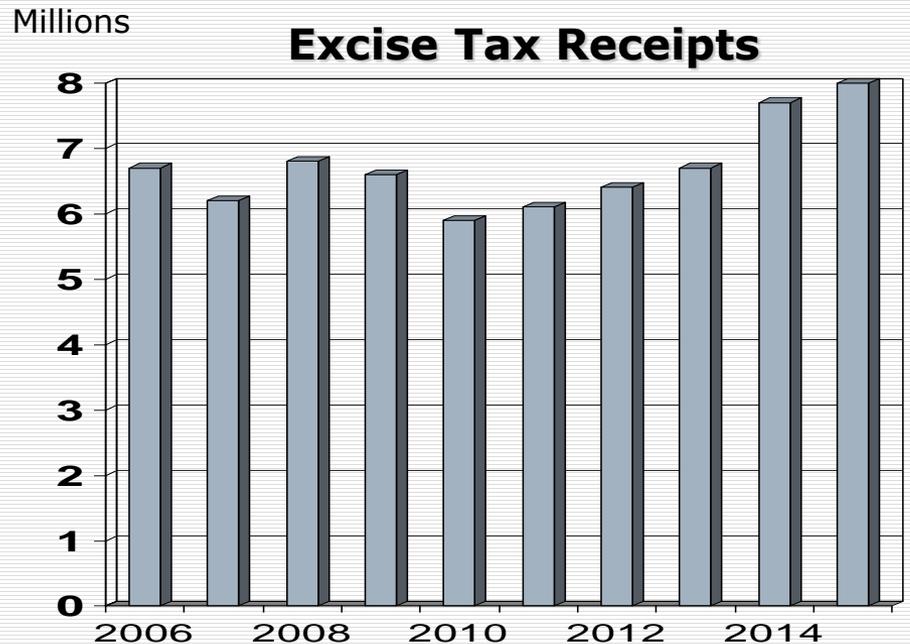
- The Town of Plymouth's annual roadway budget is **\$2 million**. This budget includes **75%** from State Funding (Chapter 90) money.
- This **limited** amount is grossly inadequate for the size of our town. Only **5.3 miles** of road repairs can be made annually.
- Roads needing repairs are rising faster than roads that need maintenance.

Annual Repairs	Length (mi)
<i>Reconstruction</i>	2.0
<i>Rehabilitation</i>	2.8
<i>Preservation</i>	0.5
Total	5.3

Motor Vehicle Excise Tax Receipts

The local excise tax was setup to allow communities to recover costs associated with local road repairs and other community costs.

During the last **10 years**, the Town of Plymouth collected almost **\$67 million** in excise tax fees yet only a minuscule amount has been used for roadway repairs



Funding Options

Last year the Town of Plymouth collected about **\$8 million** in excise taxes.

1. Transfer some money from excise tax revenue

Approximately **\$2.388 million** in excise taxes fees could be used to fund the badly needed Road Repair Bond. Excise tax receipts will rise as buildout of the Pine Hills and Redbrook community continue.

2. Tax Levy

Would add about **\$0.26** to the tax rate based on the proposed debt schedule on the next page.

Debt Service Schedule

Town of Plymouth, Massachusetts

\$25,000,000 General Obligation Bonds, Dated March 1, 2017

Paving Bonds - Level Debt Service Structure

Interest Estimated and Subject to Change

2016 Assessed Valuation \$9,128,500,223

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+	Tax Rate Impact
06/30/2017	-	-	-	-	-
06/30/2018	1,160,000.00	5.000%	1,250,000.00	2,410,000.00	0.26
06/30/2019	1,215,000.00	5.000%	1,192,000.00	2,407,000.00	0.26
06/30/2020	1,280,000.00	5.000%	1,131,250.00	2,411,250.00	0.26
06/30/2021	1,340,000.00	5.000%	1,067,250.00	2,407,250.00	0.26
06/30/2022	1,410,000.00	5.000%	1,000,250.00	2,410,250.00	0.26
06/30/2023	1,480,000.00	5.000%	929,750.00	2,409,750.00	0.26
06/30/2024	1,555,000.00	5.000%	855,750.00	2,410,750.00	0.26
06/30/2025	1,630,000.00	5.000%	778,000.00	2,408,000.00	0.26
06/30/2026	1,710,000.00	5.000%	696,500.00	2,406,500.00	0.26
06/30/2027	1,795,000.00	5.000%	611,000.00	2,406,000.00	0.26
06/30/2028	1,885,000.00	5.000%	521,250.00	2,406,250.00	0.26
06/30/2029	1,980,000.00	5.000%	427,000.00	2,407,000.00	0.26
06/30/2030	2,080,000.00	5.000%	328,000.00	2,408,000.00	0.26
06/30/2031	2,185,000.00	5.000%	224,000.00	2,409,000.00	0.26
06/30/2032	2,295,000.00	5.000%	114,750.00	2,409,750.00	0.26
Total	\$25,000,000.00	-	\$11,126,750.00	\$36,126,750.00	

Yield Statistics

Bond Year Dollars	\$222,535.00
Average Life	8.901 Years
Average Coupon	5.0000000%

Net Interest Cost (NIC)	5.0000000%
True Interest Cost (TIC)	5.0000000%
Bond Yield for Arbitrage Purposes	5.0000000%
All Inclusive Cost (AIC)	5.0000000%

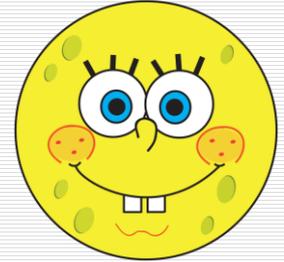
IRS Form 8038

Net Interest Cost	5.0000000%
Weighted Average Maturity	8.901 Years

Source: Town of Plymouth Finance
Department

Benefits of Road Maintenance

- ❑ Provides smooth safe efficient travel
- ❑ Reduces risks to drivers, bicyclists and pedestrians
- ❑ Can extend the life of a road
- ❑ Reduces vehicle maintenance costs
- ❑ Reduces potential lawsuits and insurance claims cause by defective roads
- ❑ Reduces flooding, erosion, and noise
- ❑ It beautifies our community



Town of Plymouth, Massachusetts

\$25,000,000 General Obligation Bonds, Dated March 1, 2017

Paving Bonds - Level Debt Service Structure

Interest Estimated and Subject to Change

2016 Assessed Valuation \$9,128,500,223

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Tax Rate Impact
#####	-	-	-	-	
#####	1,160,000.00	5.000%	1,250,000.00	2,410,000.00	0.26
#####	1,215,000.00	5.000%	1,192,000.00	2,407,000.00	0.26
#####	1,280,000.00	5.000%	1,131,250.00	2,411,250.00	0.26
#####	1,340,000.00	5.000%	1,067,250.00	2,407,250.00	0.26
#####	1,410,000.00	5.000%	1,000,250.00	2,410,250.00	0.26
#####	1,480,000.00	5.000%	929,750.00	2,409,750.00	0.26
#####	1,555,000.00	5.000%	855,750.00	2,410,750.00	0.26
#####	1,630,000.00	5.000%	778,000.00	2,408,000.00	0.26
#####	1,710,000.00	5.000%	696,500.00	2,406,500.00	0.26
#####	1,795,000.00	5.000%	611,000.00	2,406,000.00	0.26
#####	1,885,000.00	5.000%	521,250.00	2,406,250.00	0.26
#####	1,980,000.00	5.000%	427,000.00	2,407,000.00	0.26
#####	2,080,000.00	5.000%	328,000.00	2,408,000.00	0.26
#####	2,185,000.00	5.000%	224,000.00	2,409,000.00	0.26
#####	2,295,000.00	5.000%	114,750.00	2,409,750.00	0.26
Total	\$25,000,000.00	-	\$11,126,750.00	\$36,126,750.00	

Yield Statistics

Bond Year Dollars	\$222,535.00
Average Life	8.901 Years
Average Coupon	5.0000000%
Net Interest Cost (NIC)	5.0000000%
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Bond Yield for Arbitrage Purposes	5.0000000%
All Inclusive Cost (AIC)	5.0000000%

IRS Form 8038

Net Interest Cost	5.0000000%
Weighted Average Maturity	8.901 Years

Town of Plymouth, Massachusetts

\$25,000,000 General Obligation Bonds, Dated March 1, 2017

Paving Bonds - Equal Principal Debt Service Structure

Interest Estimated and Subject to Change

2016 Assessed Valuation \$9,128,500,223

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Tax Rate Impact
#####	-	-	-	-	
#####	1,670,000.00	5.000%	1,250,000.00	2,920,000.00	0.32
#####	1,670,000.00	5.000%	1,166,500.00	2,836,500.00	0.31
#####	1,670,000.00	5.000%	1,083,000.00	2,753,000.00	0.30
#####	1,670,000.00	5.000%	999,500.00	2,669,500.00	0.29
#####	1,670,000.00	5.000%	916,000.00	2,586,000.00	0.28
#####	1,665,000.00	5.000%	832,500.00	2,497,500.00	0.27
#####	1,665,000.00	5.000%	749,250.00	2,414,250.00	0.26
#####	1,665,000.00	5.000%	666,000.00	2,331,000.00	0.26
#####	1,665,000.00	5.000%	582,750.00	2,247,750.00	0.25
#####	1,665,000.00	5.000%	499,500.00	2,164,500.00	0.24
#####	1,665,000.00	5.000%	416,250.00	2,081,250.00	0.23
#####	1,665,000.00	5.000%	333,000.00	1,998,000.00	0.22
#####	1,665,000.00	5.000%	249,750.00	1,914,750.00	0.21
#####	1,665,000.00	5.000%	166,500.00	1,831,500.00	0.20
#####	1,665,000.00	5.000%	83,250.00	1,748,250.00	0.19
Total	\$25,000,000.00	-	\$9,993,750.00	\$34,993,750.00	

Yield Statistics

Bond Year Dollars	\$199,875.00
Average Life	7.995 Years
Average Coupon	5.0000000%
Net Interest Cost (NIC)	5.0000000%
True Interest Cost (TIC)	5.0000000%
Bond Yield for Arbitrage Purposes	5.0000000%
All Inclusive Cost (AIC)	5.0000000%

IRS Form 8038

Net Interest Cost	5.0000000%
Weighted Average Maturity	7.995 Years