

SCENARIO 1 Complete All 94 Miles of Roads As Proposed In The 15 Year Plan. (The Engineered Solution)

\$9.5 Million Bond \$629,180 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2038 Average Tax Impact
			\$130
The average off water (416) home value is:	\$150,700		\$196
The average waterfront (792) home value is:	\$412,300		\$537
The average home value of (1,208) all homes is:	\$322,200		\$420

<p>Pros</p>	<p>Provides an upgraded road surface for all town roads and tax payers. Provides an improved level of safety, emergency and fire access for all tax payers Expands the base of bidders possibly providing more competitive bids Provides the highest wearable, durable, and longest lasting road surface Provides road surfaces on the highest traffic roads to better withstand high volume of cars, logging and other large commercial vehicles</p>
<p>Cons</p>	<p>Highest dollar amount investment and tax implication scenario as compared to all other scenarios. May be hard to execute as proper drainage required to support all upgrades may not be achievable (lack of width, excessive tree removal, topography) Approximately 15 miles of road to be upgraded to asphalt may not be economically justifiable do to the same execution issues Will result in 28 miles of roads with double chip seal that may not need it (See Maintenance Priority)</p>

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SCENARIO 2

68 Miles of Roads Upgraded As Proposed In The 15 Year Plan, All Gravel road upgrades are excluded. (The Engineered Solution)

\$7.9 Million Bond \$525,892 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact
			\$109
The average off water (416) home value is:	\$150,700		\$164
The average waterfront (792) home value is:	\$412,300		\$449
The average home value of (1,208) all homes is:	\$322,200		\$351

Pros	<p>Provides an upgraded road surface for all town roads that were previously paved.</p> <p>Provides an improved level of safety, emergency and fire access only for those tax payers living on hard surfaces</p> <p>Less expensive financing cost as compared to Scenario I (\$7.9m investment cost vs. \$9.5m)</p> <p>Expands the base of bidders possibly providing more competitive bids</p> <p>Upgrades the wear surface on all paved roads</p> <p>Provides road surfaces on the highest traffic roads to better withstand high volume of cars, logging and other large commercial vehicles</p>
Cons	<p>2nd highest dollar amount investment and tax implication scenario as compared to all other scenarios.</p> <p>Tax payers living on gravel roads will not have their roads upgraded</p> <p>Highest average cost per mile (\$116,210) compared to all other scenarios</p> <p>May be hard to execute as proper drainage required to support all upgrades may not be achievable (lack of width, excessive tree removal, topography)</p> <p>Approximately 15 miles of road to be upgraded to asphalt may not be economically justifiable do to the same execution issues</p> <p>Will result in 28 miles of roads with double chip seal that may not need it (See Maintenance Priority)</p>

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SCENARIO 3

All Roads (94 Miles) - Asphalt Upgrades are "Strategically" deployed to maximize the higher investment cost.

(8 Miles of gravel roads with no occupants also excluded from upgrade to chip seal)

\$7.6 Million Bond \$503,131 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact
			\$104
The average off water (416) home value is:	\$150,700		\$156
The average waterfront (792) home value is:	\$412,300		\$428
The average home value of (1,208) all homes is:	\$322,200		\$334

<p>Pros</p>	<p>Provides an upgraded road surface for all town roads and tax payers. Provides an improved level of safety, emergency and fire access for all tax payers Expands the base of bidders possibly providing more competitive bids Provides a very highly wearable, durable, and longest lasting road surface for all roads Less expensive financing cost as compared to Scenario I (\$7.6m investment cost vs. \$9.5m) 2nd Low cost / mile investment option (\$80,433 / mile)</p>
<p>Cons</p>	<p>3rd Highest dollar amount investment and tax implication scenario as compared to all other scenarios.</p>

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SCENARIO 4 **68 Miles of Roads -Strategic Asphalt Applications (like scenario 3) combined with No Gravel Upgrades**

\$5.9 Million Bond \$396,182 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2038 Average Tax Impact
			\$81
The average off water (416) home value is:	\$150,700		\$122
The average waterfront (792) home value is:	\$412,300		\$334
The average home value of (1,208) all homes is:	\$322,200		\$261

<p>Pros</p>	<p>Provides an upgraded road surface for all town roads that were previously paved. Less expensive financing cost as compared to Scenario I (\$5.9m investment cost vs. \$9.5m) Provides an improved level of safety, emergency and fire access only for those tax payers living on hard surfaces Upgrades the wear surface on all paved roads Expands the base of bidders possibly providing more competitive bids</p>
<p>Cons</p>	<p>Tax payers living on gravel roads will not have their roads upgraded Leaves 22 miles of roads (gravel) unaddressed</p>

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SCENARIO 5

65 Miles of Roads -Strategic Asphalt Applications (like scenario 3) All other roads (28 Miles) upgrades to Chip Seal
27 Miles of Roads Placed in a 5 year Maintenance Plan

\$5.0 Million Bond \$337,351 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2038 Average Tax Impact
			\$69
The average off water (416) home value is:	\$150,700		\$104
The average waterfront (792) home value is:	\$412,300		\$285
The average home value of (1,208) all homes is:	\$322,200		\$222

Pros	<p>Provides an upgraded road surface for all town roads and tax payers.</p> <p>Less expensive financing cost as compared to Scenario 1 (\$5.0m investment cost vs. \$9.5m)</p> <p>Provides an improved level of safety, emergency and fire access for all tax payers</p> <p>Provides the highest wearable, durable, and longest lasting road surface</p> <p>Expands the base of bidders possibly providing more competitive bids</p> <p>Utilizes current maintenance budget to reduce capital expenditure amount</p> <p>Low cost / mile investment option (\$77,984 / mile)</p> <p>Very cost effective way of leveraging current road maintenance budget to lower the required investment level</p> <p>Provides maintenance budget management experience that can be leveraged in future years</p>
Cons	<p>Requires maintenance budget expense discipline</p> <p>Adds some complexity to the execution because two separate bidding projects will be required for five years</p>

SCENARIO 6

Complete the top 60 miles of roads based upon priority ranking using the Strategic Cost Worksheet

\$4.8 Million Bond \$320,513 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2038 Average Tax Impact
			\$65
The average off water (416) home value is:	\$150,700		\$99
The average waterfront (792) home value is:	\$412,300		\$270
The average home value of (1,208) all homes is:	\$322,200		\$211

<p>Pros</p>	<p>Provides an upgraded road surface for all town roads that were previously paved but no gravel roads Less expensive financing cost as compared to Scenario 1 (\$4.8m investment cost vs. \$9.5m) Provides an improved level of safety, emergency and fire access for tax payers living on paved roads Expands the base of bidders possibly providing more competitive bids Provides a very highly wearable, durable, and longest lasting road surface for most paved roads</p>
<p>Cons</p>	<p>May appear economical but it lacks in equability because low priority roads do not get addressed Arbitrarily leaves 30 miles of roads unaddressed</p>

SCENARIO 7

Complete the top 40 miles of roads based upon priority ranking using the Strategic Cost Worksheet

\$3.7 Million Bond \$245,443 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2038 Average Tax Impact
			\$50
The average off water (416) home value is:	\$150,700		\$75
The average waterfront (792) home value is:	\$412,300		\$206
The average home value of (1,208) all homes is:	\$322,200		\$161

<p>Pros</p>	<p>Provides an upgraded road surface for all town roads that were previously paved and some gravel roads. Less expensive financing cost as compared to Scenario I (\$3.7m investment cost vs. \$9.5m) Provides an improved level of safety, emergency and fire access but only for less than half of the tax payers</p>
<p>Cons</p>	<p>Limits the base of bidders and lessens the possibility of getting competitive bids Arbitrarily leaves 50 miles of roads unaddressed Average cost per mile the fourth highest Might look like an economical option, but given it addresses only 40 miles of roads it is a bit short sighted Leaves the town vulnerable to increased road repair costs in the near term.</p>

SCENARIO 8

Complete the top 20 miles of roads based upon priority ranking using the Strategic Cost Worksheet

\$1.9 Million Bond \$131,040 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2038 Average Tax Impact
			\$26
The average off water (416) home value is:	\$150,700		\$39
The average waterfront (792) home value is:	\$412,300		\$107
The average home value of (1,208) all homes is:	\$322,200		\$84

Pros	All high priority roads will be addressed on an annual basis Strategic Asphalt roads get completed, a few chip seal and gravel roads get upgraded Less expensive financing cost as compared to Scenario I (\$1.9m investment cost vs. \$9.5m)
Cons	Leaves the town vulnerable to increased road repair costs in the near term. Average cost per mile is the third highest Might look like an economical option, but given it addresses only 20 miles of roads it is very short sighted Arbitrarily leaves 70 miles of roads unaddressed Limits the base of bidders and lessens the possibility of getting competitive bids

SCENARIO 9

Continue Current Maintenance / Reconstruction Budgeting Levels

\$200,000 Plus 3% Inflation Added Every Other Year \$231,885 Average over 20 Years 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact	
			\$24	
The average off water (416) home value is:	150700		\$35	
The average waterfront (792) home value is:	412300		\$97	
The average home value of (1,208) all homes is:	322200		\$76	

Pros

Cons

Tax increase may be needed in any given year to fix roads that have failed or are near failing
 Continue to make repairs and improves within budget, additional emergency repairs may require additional tax payer funding
 When roads fail, we run the risk of potentially higher replacement costs as compared to a planned replacement
 Reduces the speed at which emergency service providers can respond
 Increased liability for accidents and EMS services as well as liability for vehicle repairs due to failing road infrastructure
 Property values will decrease due to the lack of sound road infrastructure
 Economic development will continue to decline
 Businesses will seek other places to open a business or move their business
 If we are not improving our infrastructure the residential and business climate will likely decline and Boulder would be a less desirable destination to live and work
 Taxes will continue to increase just to patch and repair what is falling apart
 Completely reactive in nature making it highly susceptible to inflationary factors the most expensive long term option
 Limits the ability to take advantage of any matching fund grants

Investment Handout

INVESTMENT SCENARIO SUMMARY		Investment Amount	Roads Reconditioned	Years to Completion	Tax Impact 2018 - 2038
SCENARIO 1	Complete All 94 Miles of Roads As Proposed In The 15 Year Plan	\$9,500,000	94	2	\$130
SCENARIO 2	68 Miles of Roads - Engineered Solution, NO Gravel road upgrades	\$7,900,000	68	2	\$109
SCENARIO 3	All Roads (94 Miles) - Strategic Asphalt Applications	\$7,600,000	94	2	\$104
SCENARIO 4	68 Miles of Roads -Strategic Asphalt Applications and No Gravel Upgrades	\$5,900,000	68	2	\$81
SCENARIO 5	68 Miles of Roads -Strategic Asphalt Applications / 28 Miles in Maintenance Plan	\$5,000,000	68	2 - 5	\$69
SCENARIO 6	60 Miles of Road - (Strategic Asphalt Applications - Scenario 3)	\$4,800,000	60	10	\$65
SCENARIO 7	40 Miles of Road - (Strategic Asphalt Applications - Scenario 3)	\$3,700,000	40	20	\$50
SCENARIO 8	20 Miles of Road - (Strategic Asphalt Applications - Scenario 3)	\$1,900,000	20	20	\$26
SCENARIO 9	\$200,000 "Emergency" Budget Increase	\$200,000	0 - 4	20	\$24