March 22, 2017 - ROUGH DRAFT

The Boulder Junction Town Road Improvement Project Summary

GOAL:

Develop a long-term road improvement plan to maintain, recondition where necessary, and guide the construction of new roads for the Town of Boulder Junction that is acceptable to the electorate.

BACKGROUND:

64 miles (71%) of the town's 93 total miles of roads have had little or no major reconditioning in recent history and are in need of repair.

Without a plan to properly recondition and maintain the town's roads, deterioration will continue and the costs of reconditioning will continue to rise.

PROJECT STEPS:

1. Determine the investment level estimates and scenarios
2. Obtain approval by the electors to invest in the improvement of our roads
3. Develop road-by-road reconditioning plan to maximize the approved investment level

GUIDING PRINCIPLES:

Grants and cost sharing by adjoining communities will be pursued to offset any approved investment level.

All bid documents will include the appropriate levels of engineering specifications to promote competition and cost effectiveness.

Proper drainage determines the longevity of any road surface making it a key driver in selecting the appropriate surface material for any given road.

Any road reconditioning plan needs to include an appropriate level of additional funding for long-term maintenance.

The final plan needs to include engineering and economic principles and practices that can be effectively and efficiently transferred from one administration to the next.

The top three key prioritization factors are occupancy, traffic level and road condition.

SCENARIO I Complete All Roads As Proposed With Asphalt Upgrades On Key Roads

$7.0 Million Bond $479,205 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact $101		2028-2038 Average Tax Impact $170
The average off water (416) home value is:	$150,700		$152		$256
The average waterfront (792) home value is:	$412,300		$416		$701
The average home value of (1,208) all homes is:	$322,200		$325		$548

Pros

Every road needing repair will be addressed immediately
Provides most equitable 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 most highest traffic roads to better withstand logging and other large commercial vehicles
With the maintenance included, these roads will provide a longer life expectancy

Cons

Highest dollar amount investment scenario as compared to the other scenarios.
Should be supported by increased annual road maintenance budget to protect the investment
May be hard to execute as proper drainage required to support an asphalt road may not be achievable
May require new aprons / culvert for driveways which may not be fully represented in the cost estimate
If all of the roads are done at the same time, as opposed to a staggered schedule, the town will face a complete overhaul at the same time down the road
May be the hardest to execute: no room to add drainage, utilities would need to me moved, trees cut, and driveways redone,

SCENARIO II Complete All Roads (Asphalt Upgrades Eliminated)

$5.5 Million Bond $377,423 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact $79		2028-2038 Average Tax Impact $148
The average off water (416) home value is:	$150,700		$119		$223
The average waterfront (792) home value is:	$412,300		$326		$611
The average home value of (1,208) all homes is:	$322,200		$255		$477

Pros

Every road needing repair will be addressed immediately
Less expensive financing cost as compared to Scenario I ($5.5m investment cost vs. $7.0m)
Provides most equitable safety, emergency and fire access for all tax payers
Combines best possible wear surface with low cost
Provides the scenario of Chip Seal where road structure needs to be improved and SMO where it doesn't
Expands the base of bidders possibly providing more competitive bids
A higher maintenance budget may not be needed to support these surface improvements

Cons

Sacrificing the long term wearability of asphalt resulting in higher maintenance costs and earlier replacement need
Road surface is more susceptible to damage by logging and other large commercial vehicles.

SCENARIO III Top 10 Roads (19.05 miles) As Planned With Asphalt Upgrades

$3.0 Million Bond $209,083 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact $44		2028-2038 Average Tax Impact $113
The average off water (416) home value is:	$150,700		$66		$170
The average waterfront (792) home value is:	$412,300		$181		$465
The average home value of (1,208) all homes is:	$322,200		$141		$364

Pros
- Less expensive financing cost as compared to Scenario I ($3.0m investment cost vs. $7.0m)
- Provides immediate improvement to the highest traffic, highest occupancy, worst condition roads.
- Provides most durable, wearable and longest lasting road surface

Cons
- May not get the best bids as total miles of roads to be done are reduced by 70% (19 miles vs. 64 miles)
- May limit the base of bidders
- May limit the number of the planned enhancements (more loops) to the bike trail system.
- 40 miles of road do not get addressed

SCENARIO IV Top 10 Roads (19.05 miles) Asphalt Upgrades Eliminated

$2.0 Million Bond $137,660 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact $29		2028-2038 Average Tax Impact $98
The average off water (416) home value is:	$150,700		$43		$147
The average waterfront (792) home value is:	$412,300		$119		$403
The average home value of (1,208) all homes is:	$322,200		$93		$315

Pros

Less expensive financing cost as compared to Scenario I ($2.0m investment cost vs. $7.0m)
Provides immediate improvement to the highest traffic, highest occupancy, worst condition roads.

Cons

Sacrificing the long term wearability of asphalt resulting in higher maintenance costs and earlier replacement need
May not get the best bids as total miles of roads to be done are reduced by 70% (19 miles vs. 64 miles)
May limit the base of bidders
May limit the number of the planned enhancements (more loops) to the bike trail system.
40 miles of road do not get addressed

SCENARIO V Utilize A Staggered Investment, $3m in 2018, $2M in 2023 and $2M in 2028

$3.0 Million Bond in 2018 $2.0 Million Bond in 2023 $2.0 Million Bond in 2028 $161,428 Average Principle and Interest 2018 - 2038	2016-2017 Average Assessed Value		2018-2023 Average Tax Impact $44		2023-2028 Average Tax Impact $73		2028-2038 Average Tax Impact $171
The average off water (416) home value is:	$150,700		$66		$110		$258
The average waterfront (792) home value is:	$412,300		$181		$301		$705
The average home value of (1,208) all homes is:	$322,200		$142		$235		$551

Pros

A staggered approach allows for long term planning, fixing the worst of the worst first and a plan moving forward with a eases staggered investment and tax increases

Cons

Would require a commitment by the electors to invest a large amount of money every five years
Costs five and ten years out would be subject to inflation (hard to predict for interest rates)
Will require more administrative costs because engineering and finance costs will be repeated every year or every 5 years
The number of contractors submitting bids would be reduced as a result of a smaller project

SCENARIO VI Increase Current Maintenance / Reconstruction Budgeting Levels By A Fixed Amount. e.g. $300,000 for 2018

$300,000 Added Annually Average Plus 2% Annual Inflation 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact		2028-2038 Average Tax Impact
			$69		$85
The average off water (416) home value is:	$150,700		$104		$128
The average waterfront (792) home value is:	$412,300		$284		$350
The average home value of (1,208) all homes is:	$322,200		$222		$274

Pros Some high priority roads will be addressed on an annual basis

Cons A very small number and total miles of road could be improved in any given year
Average cost per mile may be higher because of the loss of competitive bids from non-local companies
Business as usual, what you see is what you get and the most expensive approach for replacing and maintaining town roads
The illusion that this would be the most economical approach but extremely short sighted approach
Only 5 miles of road gets addressed each year

SCENARIO VII Continue Current Maintenance / Reconstruction Budgeting Levels

$200,000 Added Every Other Year Plus 3% Inflation Every 2 years 2018 - 2038	2016-2017 Average Assessed Value		2018-2028 Average Tax Impact		2028-2038 Average Tax Impact
			$45		$52
The average off water (416) home value is:	$150,700		$68		$78
The average waterfront (792) home value is:	$412,300		$186		$214
The average home value of (1,208) all homes is:	$322,200		$145		$168

Pros

Cons

Tax increase may be needed in any given year to fix roads that have failed or are near failing
Roads will get replaced only on an emergency basis
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