Method	Initial Cost & Design Life	30 Year Life Cycle Cost	Description	Pros	Cons
Full Depth Reclamation (FDR)	$8.3M, 12 years average = $692K/year	$12.0M average = $400K/year	Scope would entail removing existing pavement layer (where necessary) to add variable depth gravel for structure and grade. Pavement would then be brought back in and reclaimed and treated in place. Treatment would consist either of bituminous or cement stabilizer. Further analysis of existing subgrade soil conditions would occur to make this selection. 3' shoulders would be reconstructed of Aggregate Subbase Course Gravel. Hot mix asphalt would be placed full width atop reclaim and gravel shoulders.	Should long areas exist with favorable subsurface conditions, such that variable depth gravel not be required for structure, existing pavement could remain and be reclaimed in place, saving time and money. Treated FDR tends to be a rather consistent structure that Should allow for uniform deterioration over time.	Slightly more expensive than the PMRAP option. The need for a reclaimer and treatment may limit contractor capability to just two or three.
Plant Mixed Recycled Asphalt Pavement (PMRAP) aka "pugmill"	$7.5M ($6.0M with MaineDOT material and crew), 12 years average = $625K/year ($500K/year)	$11.2M ($9.7M) average = $373K/year ($323K/year)	Scope would consist of removing the existing pavement layer and transporting the material offsite to be crushed. Variable depth gravel would be added for structure and grade. Crushed pavement would be run though a pugmill with the addition of asphalt emulsion and portland cement and placed back on the road to design depth. Shoulders would be reconstructed of gravel. The top layer of shoulder could be construction of PMRAP if sufficient material exists. Hot mix asphalt would be placed full width atop PMRAP and shoulders.	The cheapest of the options and potentially more so if opportunity exists to partner with MaineDOT for the use of their pugmill. Any contractor with a paver could bid.	Logistics may be a little trickier (especially if using MaineDOT's pugmill) as pavement will be removed from the entire length of the project and must be crushed and mixed before returning. Variable depth gravel will need to be added shortly after this process and traffic will be running on this gravel for a longer period of time, before PMRAP can be placed. PMRAP can be a rather inconsistent material, though this can be alleviated with proper QC.
Full Reconstruction	$12.5M, 20 years average = $625K/year	$14.76M average = $492K/year	Scope would consist of full excavation of roadway to a subgrade depth (likely 30"). Aggregate Subbase Course Gravel will be installed to grade, full width. Hot mix asphalt would be placed full width.	Longest design life Least risk of premature failure	Most expensive Initially most impactful to public