

## **Economic Impacts of Preparation of Softwood Forest Residuals as Feedstocks for Biofuel Production**

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Feedstock is one of the largest cost contributors to bio-jet production in the process envisioned for the NARA project. Several of the key components for feedstock production can be varied, and these in concert with millsite processing (screening and re-sizing) can have a measureable impact on feedstock cost to conversion mouth. In concert with a carefully structured experimentally designed trial —wherein key factors of material piece size, grinder bit type and grinder screen hole size were varied and key response values of comminution power, material particle size distribution, and bulk density were measured —these feedstocks were subsequently screened in a mill-site simulation of gyratory screening where fines were downgraded to hog fuel and the oversize particles were re-sized in a hammer hog. All results were translated into economic impacts and the overall cost impact tabulated. The net impact and potential for improvement is then compared to some other key sources of believed economic leverage in the overall project economics. These results can help guide production practices to minimize feedstock production cost