

# NARA Solids Depot Fact Sheet

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## What is a Solids Depot?

A facility that receives woody biomass in the form of raw slash, forest thinnings, and/or construction and demolition (C&D) waste. Mechanically processed materials, such as wood chips or pellets, are shipped by rail or highway truck to a receiving liquids depot, integrated biorefinery (IBR) or other potential end user.

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## Critical Solids Depot Requirements



### Biomass Cost

The costs associated with handling and processing raw forest residuals and C&D waste. Costs vary based on accessibility of feedstock and proximity to processing site. However, based on NARA economic analysis, biomass costs can be upwards of one-third of the operating expenditure for a wood to biofuels plant. Estimated biomass availability in the NARA region (WA, OR, ID & MT) range from 0 to over 400,000 Bone Dry Tons (BDT) available annually.



### Labor Cost

Average county-level wages estimates. County level data in the NARA region shows a variation of average labor costs ranging from \$32,029 to \$52,000. The more complicated the processing, the greater the labor costs.



### Electricity Rates

The cost per kilowatt hour. In the NARA region, county-level electricity rates vary from 3 to 6 cents a kilowatt hour. Many of the processing steps are energy intensive, thus electricity rates can impact annual operating expenses.



### Other Infrastructure

This includes existing utilities; fermentation and separation tanks; pretreatment vats; storage, blending and distribution infrastructure. NARA examined both operating and moth-balled facilities with existing infrastructure to identify potential siting locations for biofuels facilities. Utilizing existing infrastructure can be an important way to reduce capital expenditures.

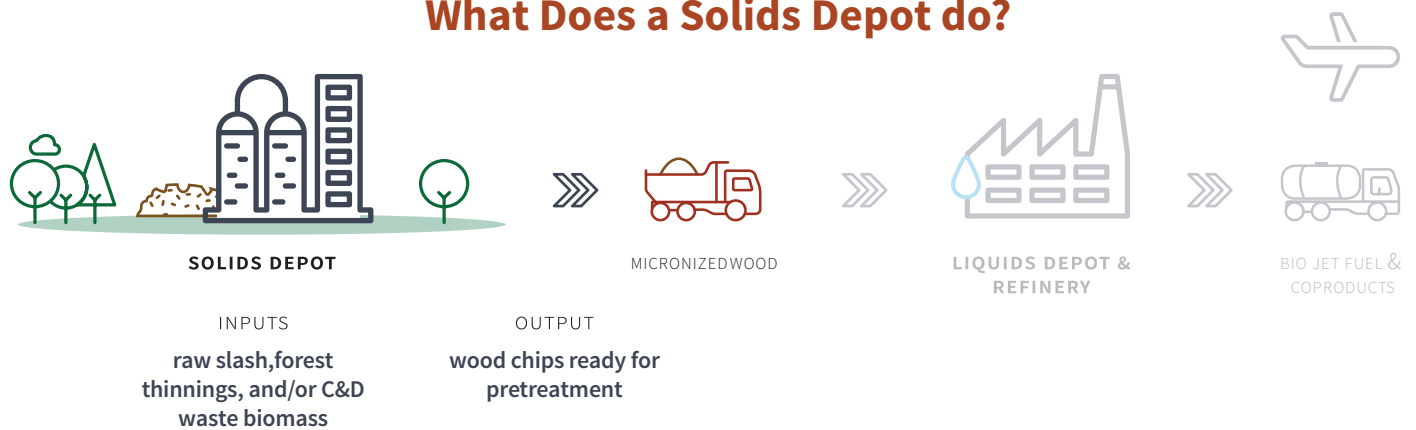
# Solids Depot Siting

A solids depot is located in close proximity to the feedstock, which could be raw forest residuals or C&D waste. A number of solids depots may provide feedstock to a liquids depot or IBR. A solids depot includes the following stages: A) Seasonal and surge storage for raw biomass; and B) Mechanical feedstock size reduction, i.e., grinding or chipping. A solids depot could supply a liquids depot or IBR with feedstock delivered via highway truck or rail hopper car.

The selection criteria for solids depot siting are:

- **Locally Available Feedstock**
- **Barge access**
- **Rail Transport Link**
- **Electricity Rates**

## What Does a Solids Depot do?



## The Solids Depot's Role in the “Wood to Wing” Process

