

# FUEL SAVINGS in detail



TrailerBlade™

- Predicting Fuel Savings:
  - Current MPG
  - Current Fuel Cost
  - Annual Highway Miles Driven
  - Tested Fuel Savings Percentage
  - Trailer-to-Tractor Ratio
- SmartWay's™ Rigorous Requirements
- An Inferior Product Will Cost You Thousands
- TrailerBlade's™ Payback is Measured in Months, not Years



## SmartWay Requirements

In order to achieve Smartway certification, TrailerBlade had to demonstrate a minimum fuel savings of 5% to qualify as an Advanced Side Skirt. The SmartWay test requires an SAE J1321 fuel economy test be performed at a certified track and be supervised by an independent, certified testing engineer. Both the track and the engineer must be pre-approved by the EPA in order for the test to be valid. Wind speed cannot exceed 12 mph throughout the test and the temperature range is relatively narrow. The test is run with a loaded trailer and the fuel is weighed to precisely measure the fuel used. **These rigorous standards are enforced to ensure that SmartWay certified equipment does what it claims--saves fuel.**

## “Real World” vs. Tested Savings

The SmartWay certification test is conducted at highway speeds. Any aerodynamic device loses effectiveness at lower speeds. If your tractors spend a large percentage of operating time at lower speeds, then your fuel savings will be less. Therefore, **accurately predicting your highway miles is a critical factor in determining your fuel savings.**

## Inferior Products Will Cost You

The minimum standard for a SmartWay Certified side skirt is 4%. Using the numbers from the example to the right, purchasing a skirt that generates only 4% in fuel savings **would reduce your savings by \$14,531 over the life of the trailer** (\$46153 X .0315 X 10 years).

## Payback in Months, Not Years

Fuel savings is obviously based on the tractor, but to determine payback you must use the annual savings per trailer figure calculated in Step 5. Using the example on the right, **the payback on TrailerBlade, at retail price and including labor at retail rates, would be much less than 1 year.**

## Sample Fuel Savings Calculations

Sample Numbers Are In Red

1. Note the following:

a. Average MPG	_____	<u>6.5</u>
b. Current Fuel Cost	_____	<u>\$3.00</u>
c. Annual Highway Miles Driven	_____	<u>100,000</u>
d. Tested Fuel Savings Percentage	<u>.0715</u>	<u>.0715</u>
e. Trailer-to-Tractor Ratio	_____	<u>2:1</u>

2. Calculate Annual Gallons Used in Highway Driving

$$\frac{\text{Annual Highway Miles Driven}}{\text{Average MPG}} = \frac{100,000}{6.5} = 15385 \text{ Gallons Used}$$

3. Calculate Fuel Cost for Highway Miles Driven

$$\text{Gals Used} \times \text{Cost Per Gal} = 15385 \times \$3.00 = \$46153 \text{ Fuel Cost}$$

4. Calculate Annual Savings per Tractor

$$\text{Fuel Cost} \times \text{Savings Pct. } .0715 = \$46153 \times .0715 =$$

**\$3300 Annual Savings Per Tractor**

5. Calculate Annual Savings per Trailer

$$\frac{\text{Annual Savings per Tractor}}{\text{Trailer-to-Tractor Ratio}} = \frac{\$3300}{2} =$$

**\$1650 Annual Savings Per Trailer**

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There are dozens of factors that affect fuel consumption and it is impossible to accurately predict future fuel economy. However, the TrailerBlade has proven fuel savings of 7.15% at highway speeds in strict accordance with EPA testing guidelines. Based on this data, the above can serve as a guide toward what fuel savings you might be able to achieve using the TrailerBlade