## Introduction

When you discuss the purchase of an overland expedition vehicle (OEV), typically the only costs mentioned are the purchase cost and the options cost. Very rarely, ongoing operational costs are mentioned. You will probably never hear anyone discuss the costs of selling of the OEV when they are done using it. Unfortunately for potential and current owners, the purchase price is only a small portion of the total costs of the ownership experience with an OEV.

The critical perspective that is missing from almost every OEV purchase is not the simple cost of the vehicle and its options but the total cost of ownership (TCO) of the vehicle over the entire time span of ownership experience.

# **Total Cost of Ownership**

The total cost of ownership of an OEV is more than the purchase price. Total cost of ownership includes all costs associated with owning and operating the OEV.

Every capital investment, whether it is a manufacturing plant, a production line, a server rack, a boat, a home, a car, a television and yes, an OEV, has three categories of costs in its total cost of ownership.

- Acquisition
- Utilization
- Divestment

When calculating the total cost of a capital asset, you must consider and include all three elements.

Acquisition costs include research, consulting or other evaluation costs, travel, trade shows, dealer visits, demonstrations, test rentals, inspections, certifications, shipping, taxes, fees, professional services (engineering, consulting, legal, accounting, etc.), cost of capital (financing costs) and the asset cost (purchase price).

Utilization costs include operational costs, consumables (fuel, consumable parts, etc.), repair (labor and parts), upgrades, renovations, operating fees, taxes (property, asset, etc.), storage, etc.

Divestment costs include upgrade or repair to make salable, inspections, certifications, taxes, shipping, professional services (legal, accounting, etc.) and the costs of sales (sales commissions, transaction fees, etc.).

It is all too easy when considering a capital asset purchase to only consider the asset cost. While you may be able to easily afford the purchase price and the cost of capital, the other elements of the TCO may add up to more than your free cash flow can support.

The wild card of emotion often blinds us to the total cost of ownership of an asset, especially an OEV. We learn the initial purchase price and we rationalize our ability to afford that amount, completely disregarding the ongoing operational costs or low residual value of the asset at the end of the utilization period.

### Summary

Every asset purchase from a toaster to a manufacturing plant involves all three TCO categories of costs. Whatever capital asset you are considering purchasing, regardless of size or cost, especially an OEV, perform a complete TCO analysis prior to purchase and after divestment. It is the only way to fully understand the true cost of ownership of an asset.

However, in our defense, no cold, strictly economic analysis can tell the complete OEV ownership story. You must compare the extrinsic net TCO with the intrinsic emotional, spiritual and life experience rewards of an OEV ownership experience to determine if, for you, it was all worth it.

# Performing a TCO Analysis

A Microsoft Excel Overland Expedition Vehicle (OEV) Total Cost of Ownership (TCO) analysis model is located here:

http://www.hackneys.com/travel/docs/oevtco.xls

Sample print report output from the model is located here: http://www.hackneys.com/travel/docs/oevtco-sample.pdf

### **Prerequisites:**

- Microsoft Excel (Office 2003), higher version or ability to utilize XL 2003 format files
- Known costs (purchase price, tax rates, etc.)
- Estimated costs (fuel, operational costs, etc.)

### Steps:

- 1. Download the model spreadsheet to your computer
- 2. Open the model in XL
- 3. Perform a File:Save As operation and change the name of the model to preserve the original version
- 4. Enter your data into any cell that is colored green
- 5. Perform periodical File:Save As operations as you load the model. It is a good idea to increment the file name as you progress, i.e. myOEV-TCO 01, myOEV-TCO 02, myOEV-TCO 03, etc.
- 6. Save the final version of the model

### Viewing results:

7. Click on the tabs at the bottom of the spreadsheet to select the data you wish to review, i.e. Inputs (input data and detail calculations), Quick Answers (summary and bottom line, "cut to the chase" results), or Charts (chart view of results data). The amortization tabs will show you the detailed amortization schedules if you finance your OEV.

## Printing results:

- 8. To print a report, select File:Print
- 9. In the "Print What" area, select "Entire workbook"
- 10. Click OK