

# The Importance of Fleet Management to an *Organization's Budget*



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# Objectives

1. Identify various components required to calculate the Total Cost of Ownership (TCO) of operating a fleet of vehicles.
2. Evaluate if self-managed fleet solutions or outsourced fleet management solutions are a better fit for your organization.
3. Identify and evaluate the financial and operational impacts of strategic fleet planning (planned timing of acquiring and selling fleet vehicles).

# Total Cost of Ownership

*Managed Vehicle vs. Internal Resources (Self Managed)*

Managed Vehicle

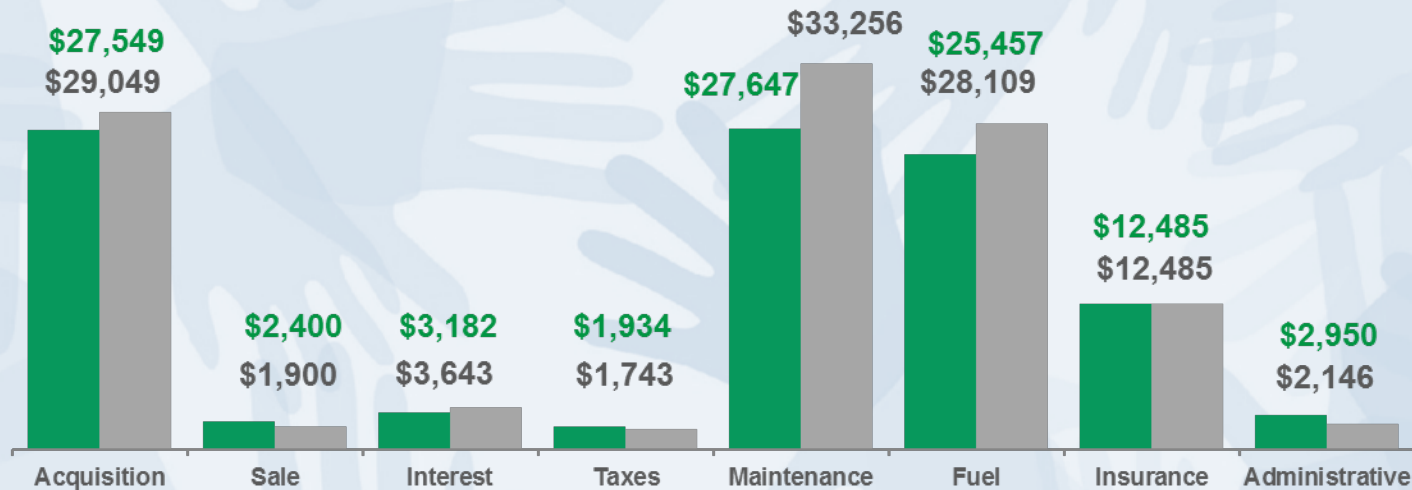
**\$98,804**

Self Managed

**\$108,582**

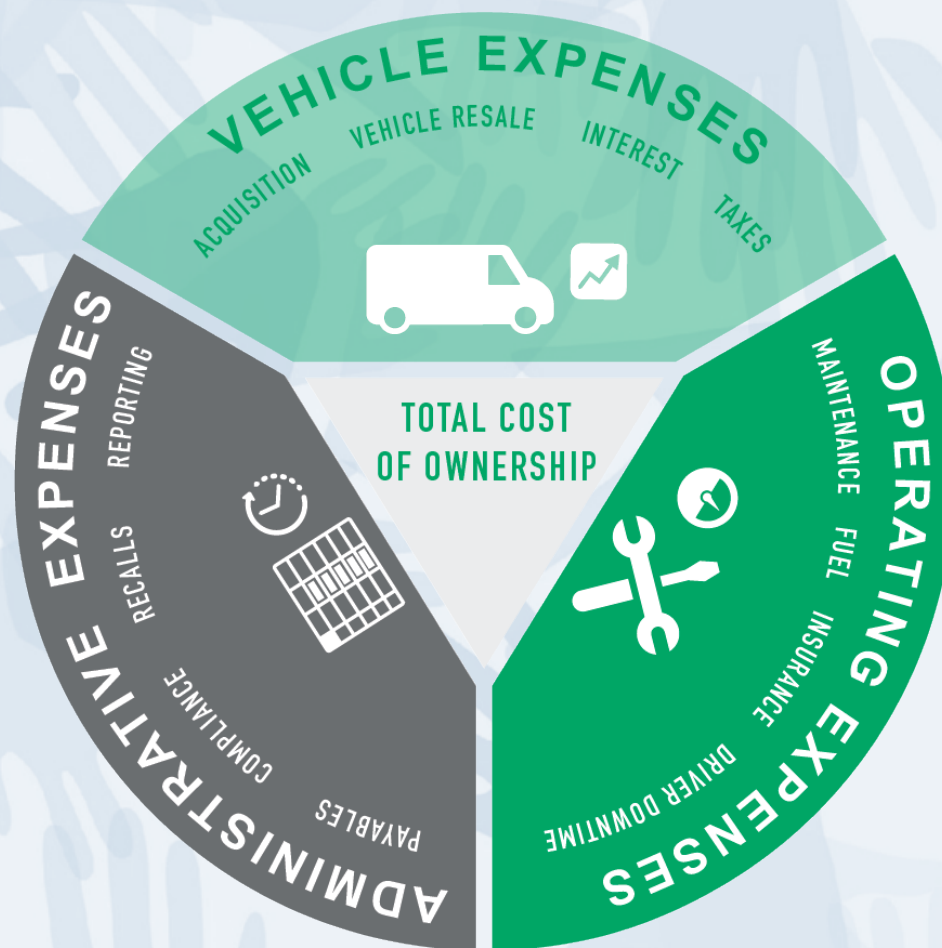
Savings per Vehicle

**\$9,778**



# Expenses of Operating a Vehicle

## *Self Managed*



# Cost of Operating a Vehicle

*Self Managed, Buy and Hold*

Ford F-150  
8 years  
200,000 miles

## Vehicle Expenses

Depreciation	
Acquisition	
Vehicle Cost	\$29,049
Aftermarket Equipment	\$2,000
Sale of Vehicle	
@ 8 years, 200,000 miles	\$1,900
Interest	
5 year loan interest rate	4.75%
Taxes	
Sales Tax	6.00%



# Cost of Operating a Vehicle

*Self Managed, Buy and Hold*

Ford F-150  
8 years  
200,000 miles

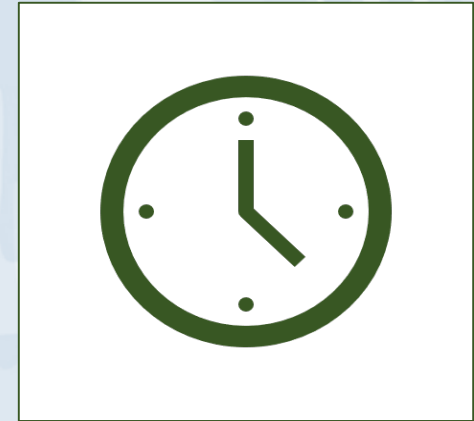
## Operating Expenses

Maintenance	
Scheduled Maintenance	Provider's Recommendations
Unscheduled Repairs	Unknown
Driver Downtime	\$50/ day
Fuel	
Price / Gallon	\$2.65
Fuel Economy	21.50 MPG
Fuel Inflation	3.0%
Insurance	
Rate / Month	\$135

# Cost of Operating a Vehicle

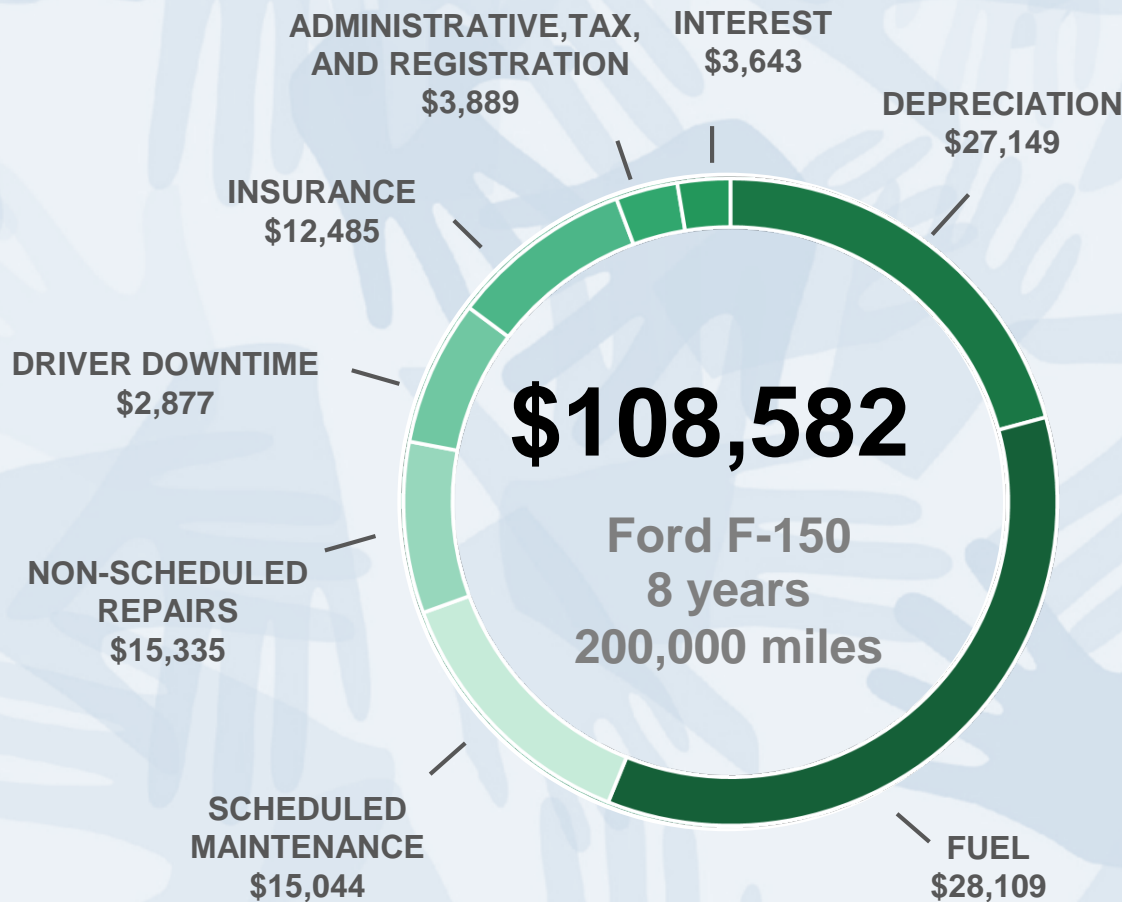
## *Administrative Time and Resources*

- **Vehicle Logistics**
  - Determine right time to buy and sell
  - Manage the vehicle purchase process
  - Manage the aftermarket process
  - Coordinate vehicles in and out of service
  - Manage the vehicle resale process
- **License & Title Compliance**
- **Recall Management**
- **Driver Training and Safety**
- **Reporting**



# Cost of Operating a Vehicle

## *Self Managed, Buy and Hold*



### Additional Considerations

Income Tax Rate	35%
Cost of Capital	4.75%
Annual Inflation	2%

Source: Internal Data  
Total amount is determined without consideration for Income Tax, time value of money (present value) concepts or inflation. Assumes a holding period of 8 years at 25,000 miles per year.



# Cost of Operating a Vehicle

*Self Managed, Buy and Hold*

**50** Vehicles  
8 years  
200,000 miles

**\$5,429,083**

**Total Cost**

**\$678,635**

**Average Annual Spend**

**54¢**

**Cents Per Mile**

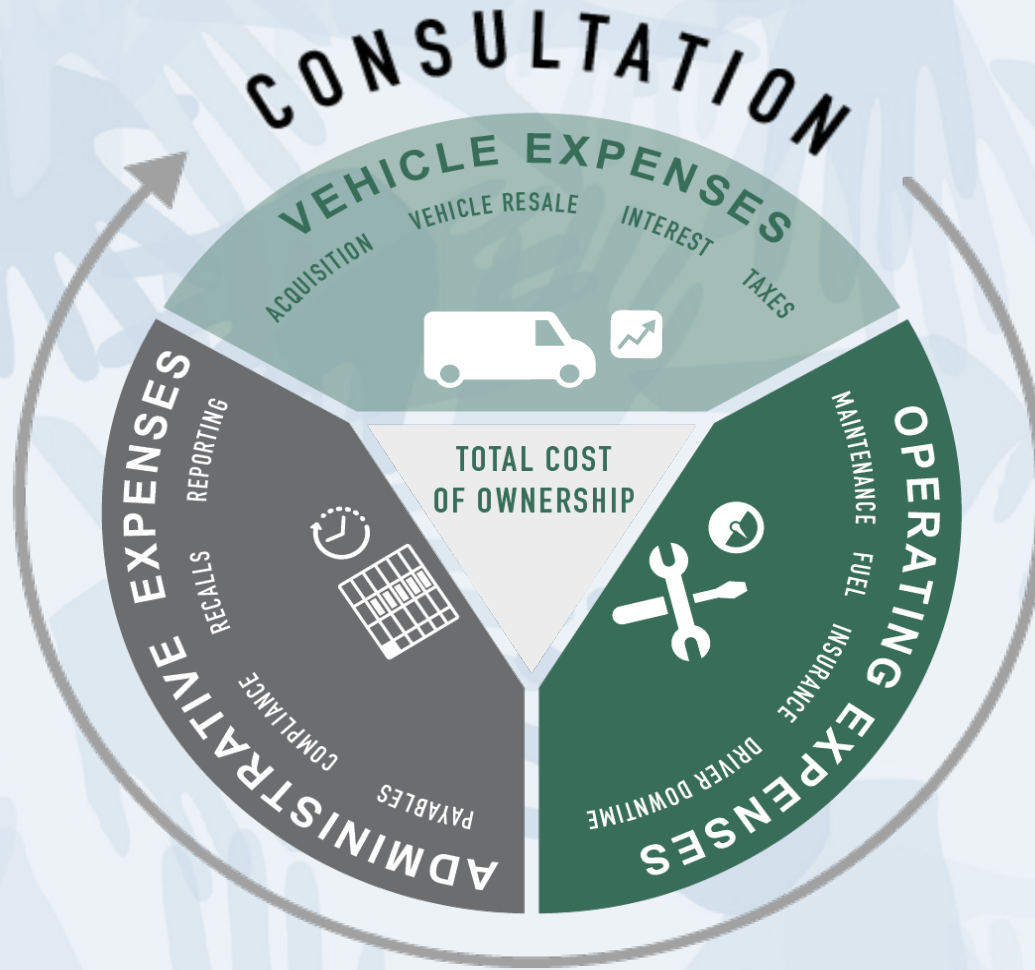
**\$3,002,831**

**Present Value**

***Current IRS Standard Rate for  
Business Mileage Reimbursement is 54.5¢ per mile***

# Total Cost of Operating a Vehicle

## *Managed Fleet*



# Fleet Management

Having an expert opinion to evaluate industry trends and consult on business needs in order to plan ahead for the future.



## Business Peaks

- Business growth, need vehicles fast.
- Don't use capital for purchases.
- Don't overpay because of unnecessary equipment and lack of dealer inventory.

## Business Valleys

- Idle Vehicles = Idle Capital
- Don't sell in "fire-sale" mentality, may not get a good price
- Don't Hold unused/unneeded equipment

# Analogy

## *Fleet Manager is Similar to a Tax Professional*

### Tax Professional

Tax Professionals implement proper cash flow planning techniques and ensure all proper deductions for constantly-changing tax codes are filed properly.

### Fleet Manager

*A Fleet Manager designs a flexible vehicle plan to ensure the business minimizes costs and liabilities concerning one of its largest company investments – its vehicles.*

A company can operate without professional advice,  
but it's likely to cost more long term.

# **The Role of Fleet Management**

## ***Managing and Controlling Costs***

- **Vehicle Financing**
- **Vehicle Acquisition**
- **Monitor and Controlling Operating Costs**
  - **Maintenance and Repair**
  - **Fuel**
- **Vehicle Sale**
- **Vehicle and Driver Safety**
- **Vehicle Replacement Strategy**
- **Administrative Time and Effort**



# Vehicle Finance Options



**Self Funded / Cash**



**Finance / Loan**



**Lease Options**

*98% of fleet  
management  
leases*

**3**

# Vehicle Lease Options

## Close End Lease

- *Traditional Dealer Lease Financing*
- *Risk remains with the lessor*
- *Terms of the lease are fixed*
- *Mileage restrictions*
- *Penalties:*
  - *Wear and tear*
  - *Early term*

## Open End Lease

- *Optimize cash flow with flexible lease options*
- *Customer retains all rights to Equity*
- *Terms of the lease are open*
- *Risk remains with the lessee*
- *No mileage restrictions*
- *No penalties:*
  - *Wear and tear*
  - *Early term*

# Open End Lease

## *Example*

<b>Monthly Depreciation Rate, 36 Month Term</b>	<b>2.00%</b>
Capitalized Cost	\$20,000
Book Depreciation	\$14,400
Book Value	\$5,600
Selling Price	\$6,600
Equity	\$1,000
Actual Lessee Cost (Economic Depreciation)	\$13,400

- *Equity: If vehicle sells for \$5,600 the customer owes nothing; if the vehicle sells for \$4,600 the customer owes \$1,000.*
- *The structure of the lease offers both a flexible finance option as well as a set term that acts as a trigger to analyze the Hold vs. Replace decision.*

# Vehicle Acquisition



**Vehicle Selection**



**Factory Order vs. Stock**



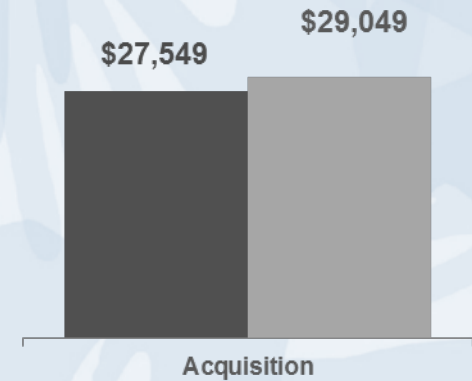
**Aftermarket Equipment  
Process**



Managed Fleet	Self Managed
\$27,549	\$29,049

Savings per Vehicle
\$1,500



# Vehicle Selection

**52**

**F-150 MODEL OPTIONS**  
(without adding colors, interior options)



**\$25,000 to  
\$40,000+**  
PRICE RANGE

**\$500 to \$1,000+**  
FOR OPTIONS

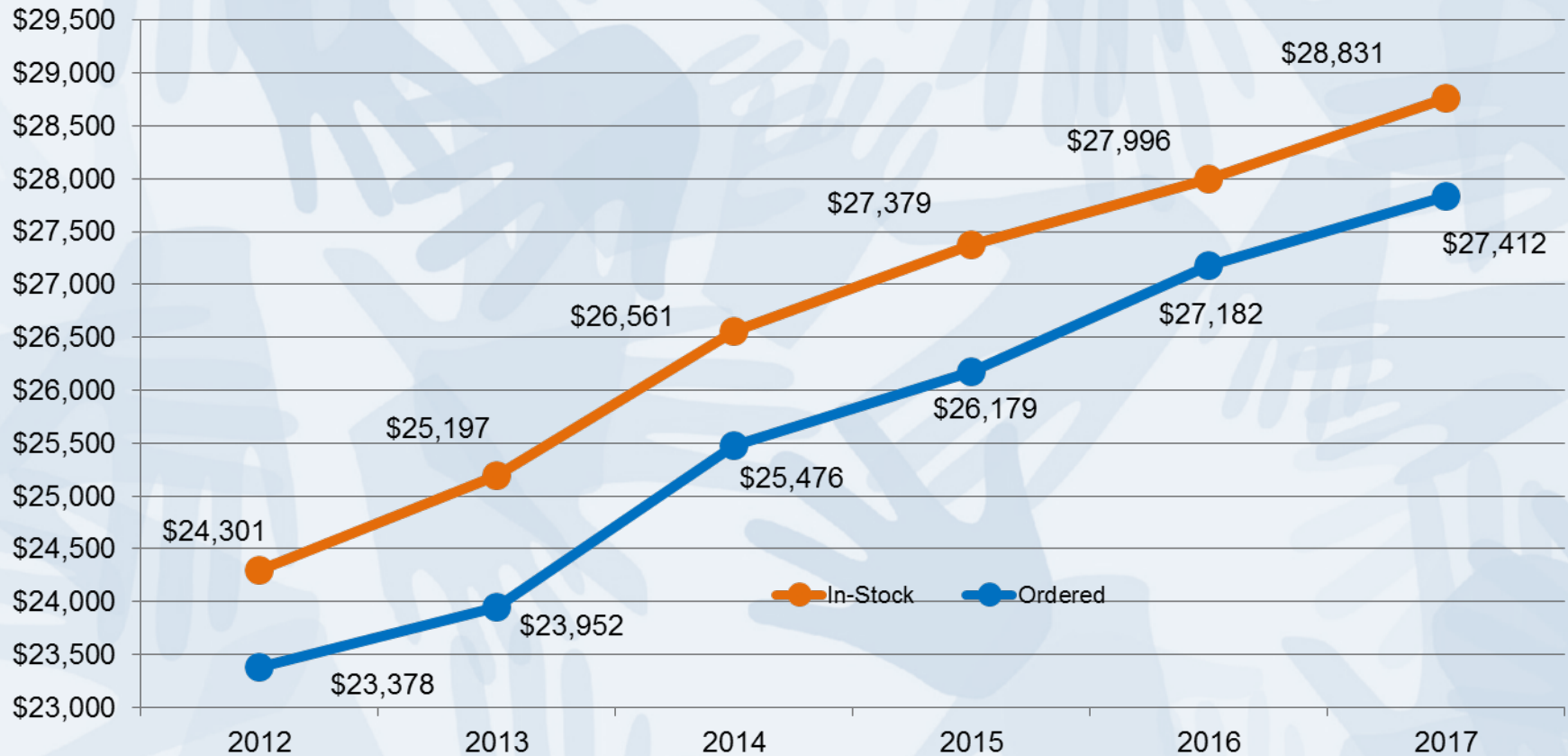
*There are approximately 2,200 different series of vehicles and constantly changing incentives each year.*



# Vehicle Acquisition

## *Factory Order vs. Stock*

Average Savings  
of  
**\$1,000+**  
per vehicle

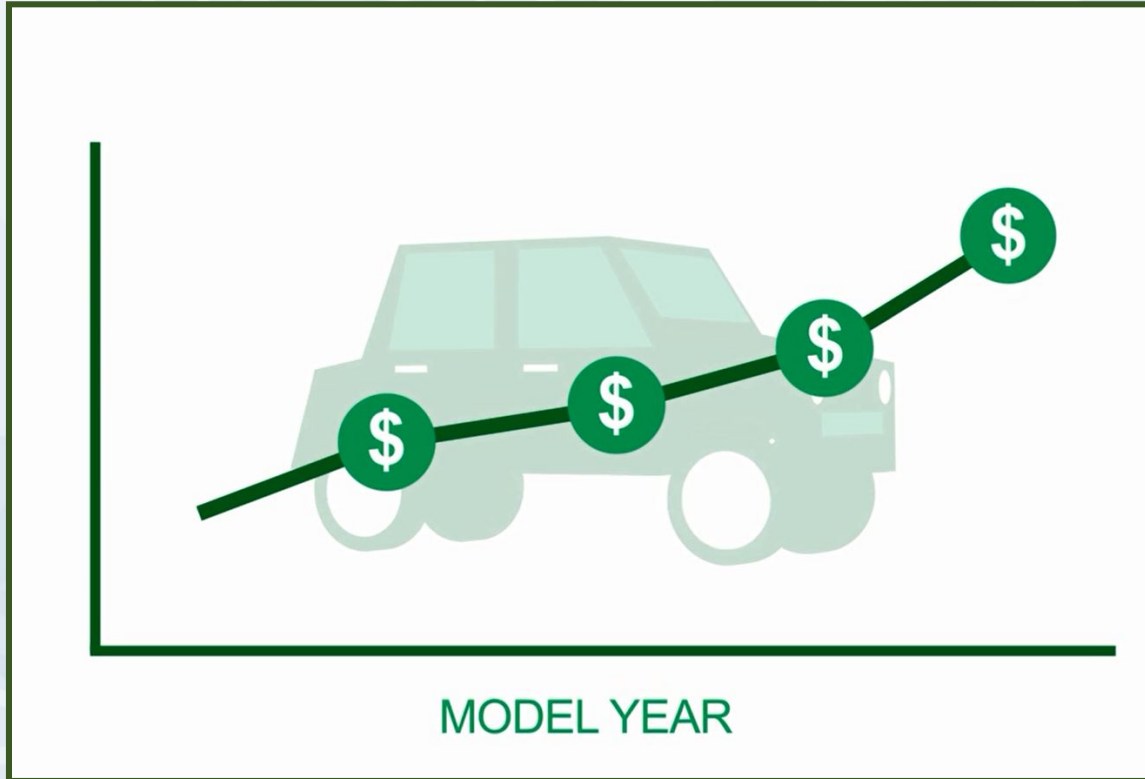


# Vehicle Acquisition

## *Planning Ahead*

*Companies save thousands of dollars by:*

- Proactive Replacement Plan
- Incentive Strategies
- Ordering Early in Model Year



Manufacturer prices can increase up to  
**4X** within the same model year

# Vehicle Acquisition

## *Aftermarket Process*

- Manage logistics
- Timing: quotes take anywhere from a week to months depending on the inventory and complexity of the order
- Cash gets tied up in assets with no off-setting revenue
- High probability of mistakes during ordering process



# Outsourcing Fleet Management

## *Questions to Ask*

- How many vehicles does the company need to operate?
- Is an additional source of capital important to the business?
- Have all vehicle manufacturers and class options been evaluated specific to the organization's needs?
- Is the business equipped to analyze the new products that enter the market (i.e., Hybrids, compressed natural gas, electric, etc.)?

Think of an existing client with a fleet of vehicles and ask these questions.

# Maintenance & Repairs

Managed Fleet	Self Managed
\$27,647	\$33,256

Savings per Vehicle
\$5,609



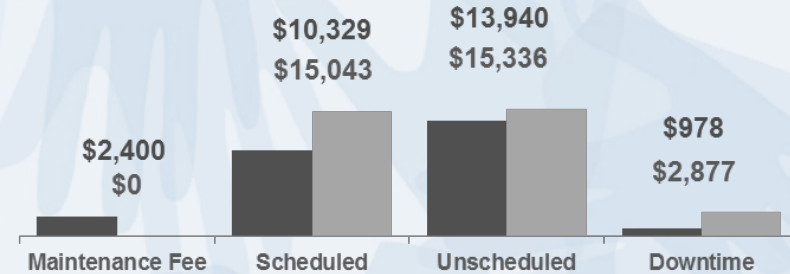
## Scheduled Maintenance



## Unscheduled Repairs



## Driver Downtime





# Scheduled Maintenance, Wear & Tear

*½ Ton Truck, 200,000 Miles*



Service	Count	Cost	Total
Oil Change	40	\$35	\$1,400
Tire Rotation	20	\$25	\$500
Air Filter	13	\$35	\$455
Wiper Blades	13	\$50	\$650
Fuel Filter	8	\$80	\$640
Brake Sets	6	\$470	\$2,820
Tires	6	\$700	\$4,200

*An outsourced Maintenance Management Program provides technical assistance to evaluate proper service intervals.*

# Unscheduled Repairs

*½ Ton Truck, 200,000 Miles*



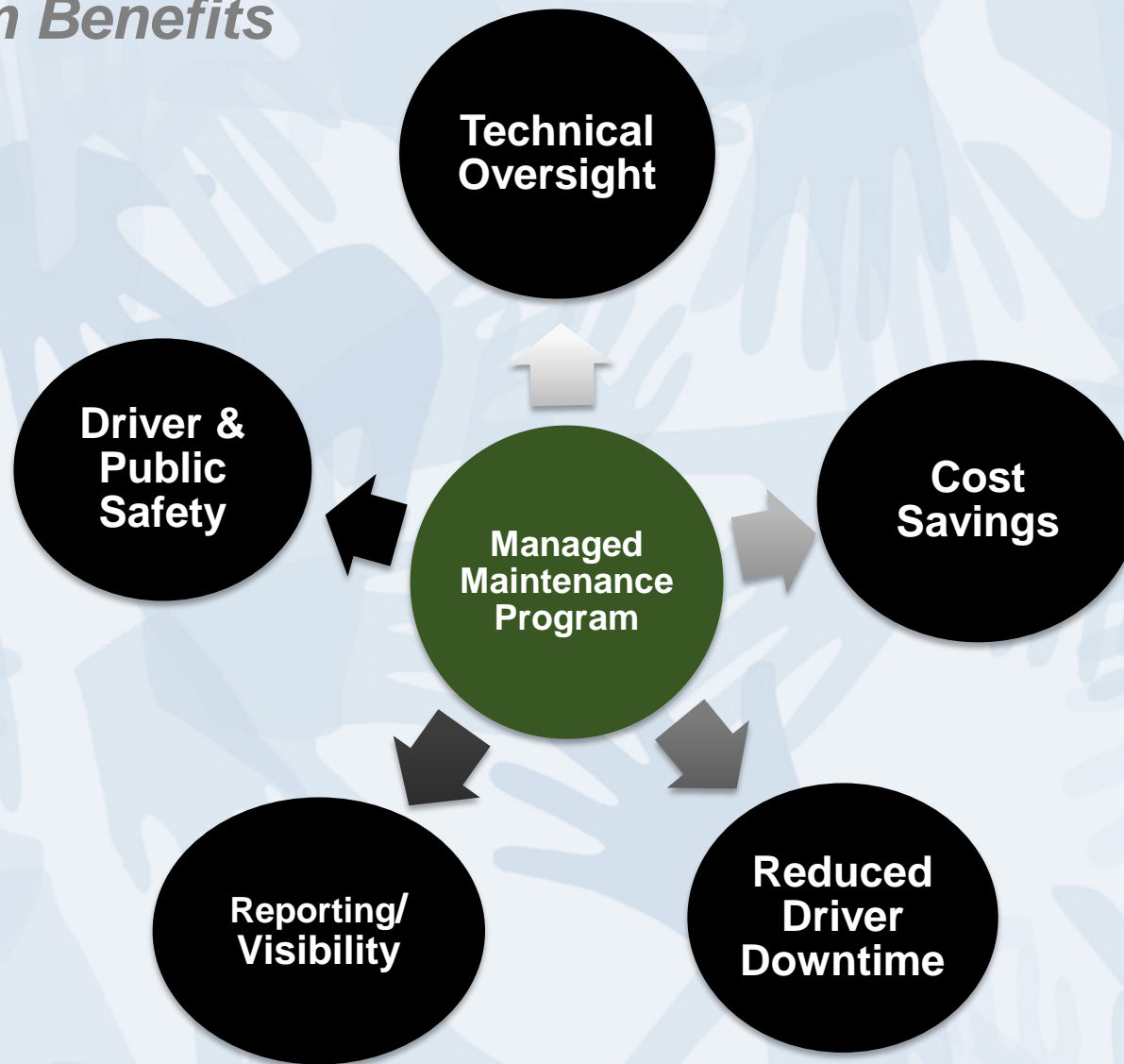
Component	Cost
Electrical	\$370
Cooling System	\$500
Braking	\$520
Steering / Suspension	\$620
Fuel System	\$710
Transmission Replacement	\$3,800
Engine Replacement	\$6,000

*The Unknown*

*A Managed Maintenance Program will identify appropriate repairs, available manufacturer assistance and/or warranties and negotiate pricing.*

# Managed Maintenance

## *Program Benefits*



# Fuel

## *Program Benefits*

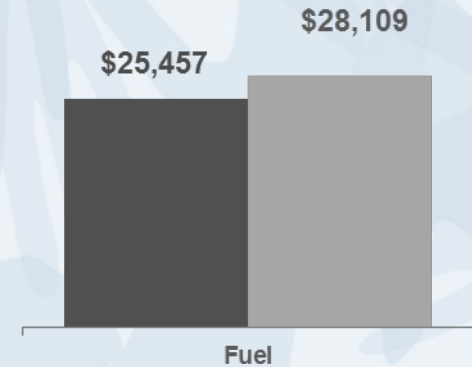


Fuel is often the most expensive operational costs associated to owning a fleet.

- Program Rebates
- Tracking & Reporting
- Security & Purchase Controls
- Convenience

Managed Fleet	Self Managed
\$25,457	\$28,109

Savings per Vehicle
\$2,652

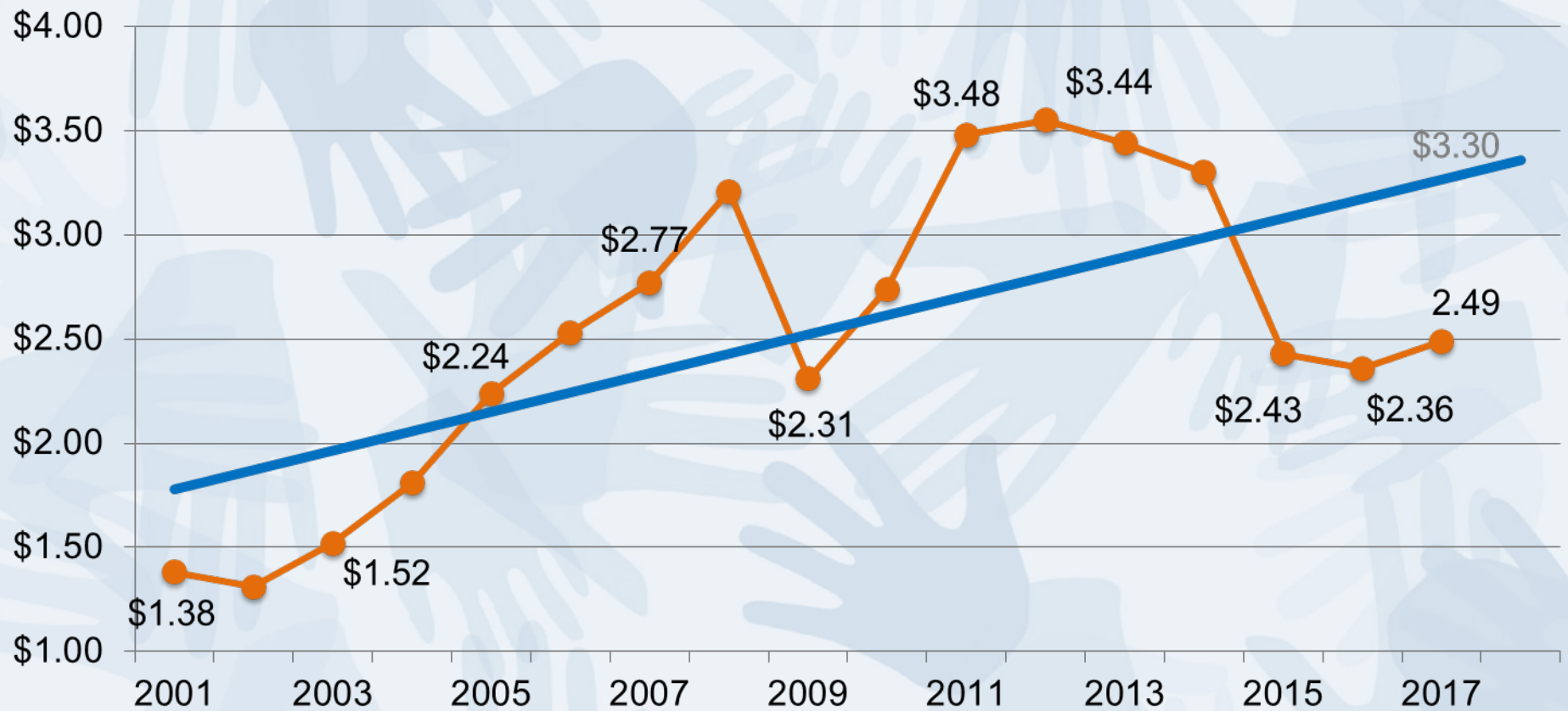


\$33,872  
per vehicle

# Fuel Prices

*Average Unleaded Fuel PPG 2001-2017*

Average Annual  
Price Increase of  
**4%**



*Source: U.S. Energy Information Administration*



# Vehicle Sale

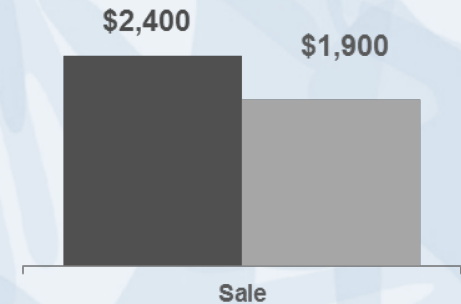
*Maximum Value  
with Easy Selling Process*

- Industry experts will plan and coordinate the best time to sell.
- Optimal exposure through multiple resale channels.
- Minimal staff time.
- Equity is maximized.

Managed Fleet	Self Managed
\$2,400	\$1,900

Difference per Vehicle
\$500



# Outsourcing Fleet Management

## *Questions to Ask*

Think of an existing client with a fleet of vehicles and ask these questions.

- Does someone with automotive experience approve all company vehicle maintenance and repair expenditures?
- What mileage intervals are all vehicles being serviced?
- Are maintenance expenses tracked on a vehicle-by-vehicle basis?
- Is vehicle downtime a significant detriment to the business?
- Is it difficult to dispose of vehicles during a business downturn?
- Does the company own any idle vehicles?

# Cost of Operating a Vehicle

*Self Managed Program vs.  
Managed Fleet Program*

**Ford F-150**  
**8 years**  
**200,000 miles**

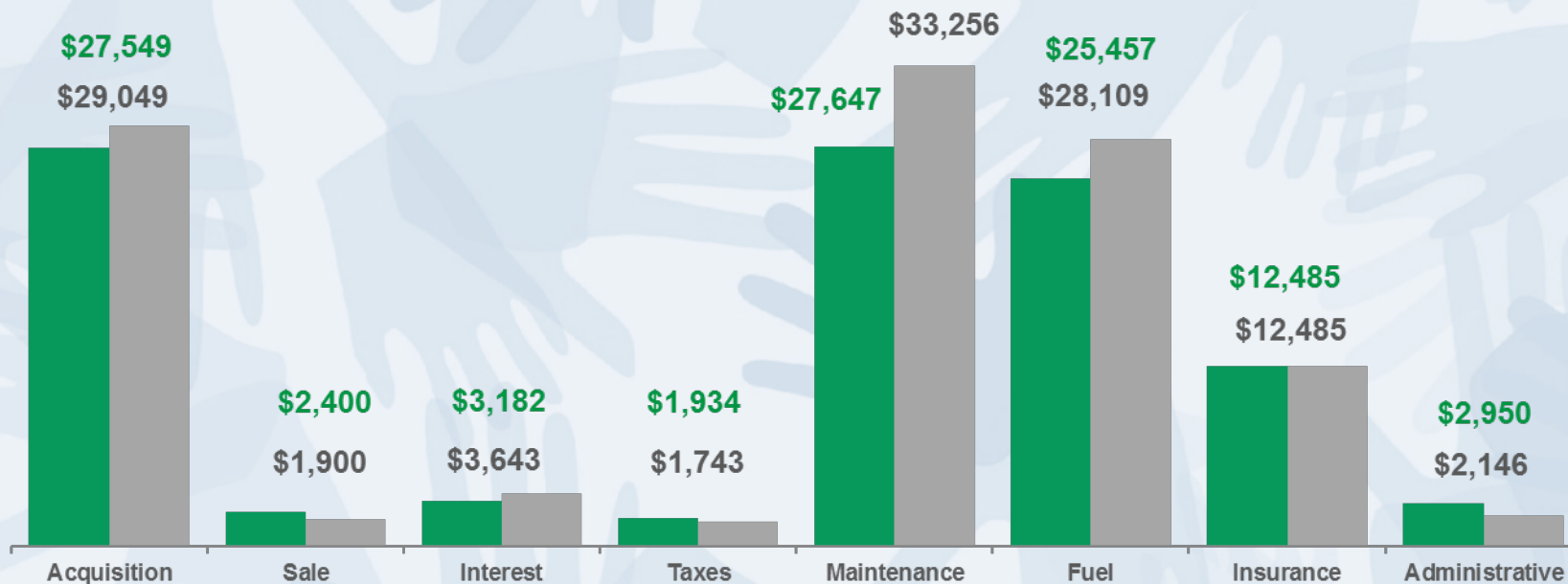
Managed Fleet
<b>\$98,804</b>

Self Managed
<b>\$108,582</b>

Savings per Vehicle
<b>\$9,778</b>

## Managed Fleet Considerations

Interest Rate	4.45%
Administrative Fee	\$25 per Month
Managed Maintenance Fee	\$25 per Month
Other End of Term Fees	\$300



# Cost of Operating a Vehicle

*Self Managed Program vs.  
Managed Fleet Program*

50

Vehicles

8 years

200,000 miles

## Total Cost Savings

\$488,885

Self Managed Program	
Total Cost	\$5,429,083
Average Annual Spend	\$678,635
Cents Per Mile	54¢
Present Value	\$3,002,831

Managed Fleet Program	
Total Cost	\$4,940,198
Average Annual Spend	\$617,525
Cents Per Mile	49¢
Present Value	\$2,718,248

*Current IRS Standard Rate for  
Business Mileage Reimbursement is 53.5¢ per mile*

# The Decision to Replace

## *Value of a Replacement Strategy*

The Lease Term acts as a “trigger” and can be used to implement a Replacement Strategy establishing a predetermined period of time.

Analyze the *Objective and Subjective* components of the Replacement decision and ask:

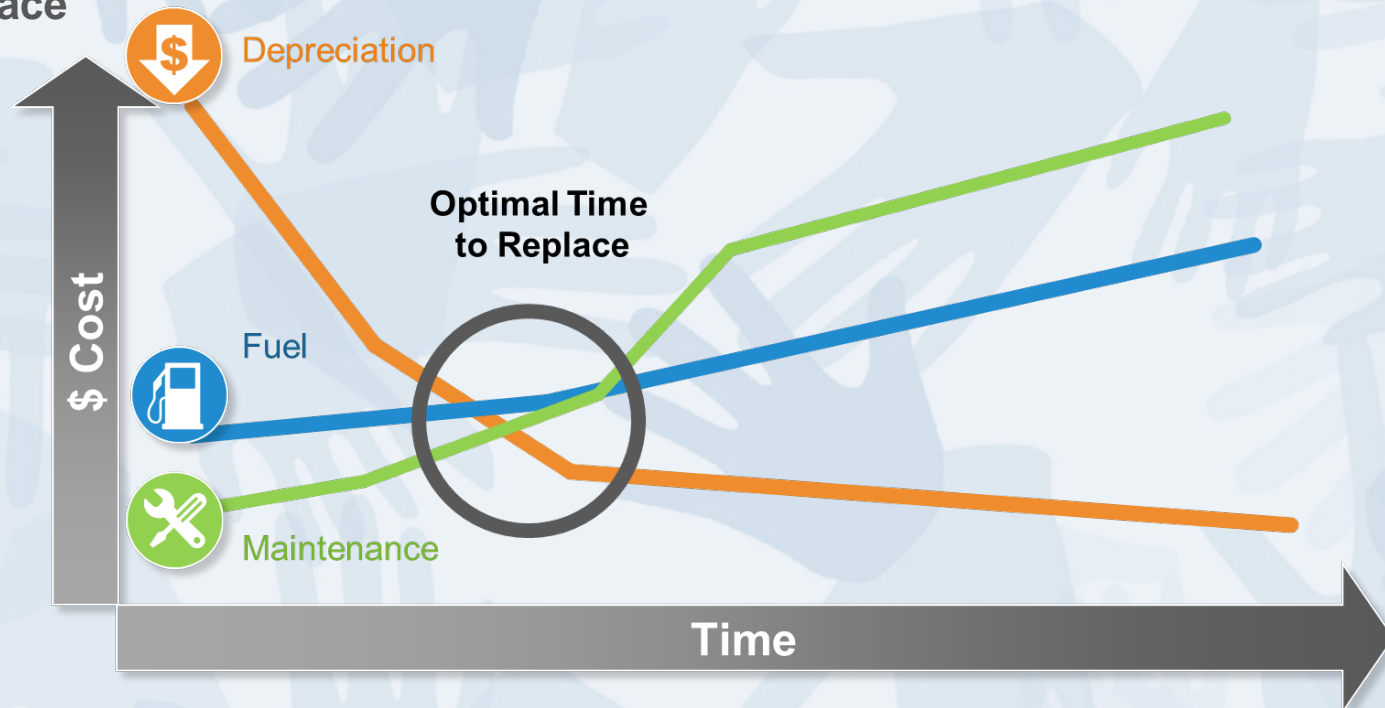
*What if we drive a new vehicle 4 more years rather than drive the existing vehicle 4 more years?*

- What if there is a major unscheduled repair?
  - What if new car prices increase?
  - What if used car prices decrease?
- What if fuel prices rise greater than the inflation rate?

# Optimal Time to Replace

## *Recommending the Best Economic Decision*

- Does it make economic sense to replace at a specific point in time based on the Objective and Subjective facts as we know them today
- Decision to replace is a combination of managing inherent risk of ongoing operating expenses
- Need to consolidate and track all vehicle costs to determine the optimal time to replace





# The Decision to Replace

## *Manage and Mitigate Risk of Unknown Expenses*

### **Objective:**

*What We Know*

- *Cost of a new vehicle*
- *Value of the existing vehicle*
- *Scheduled maintenance*

### **Subjective:**

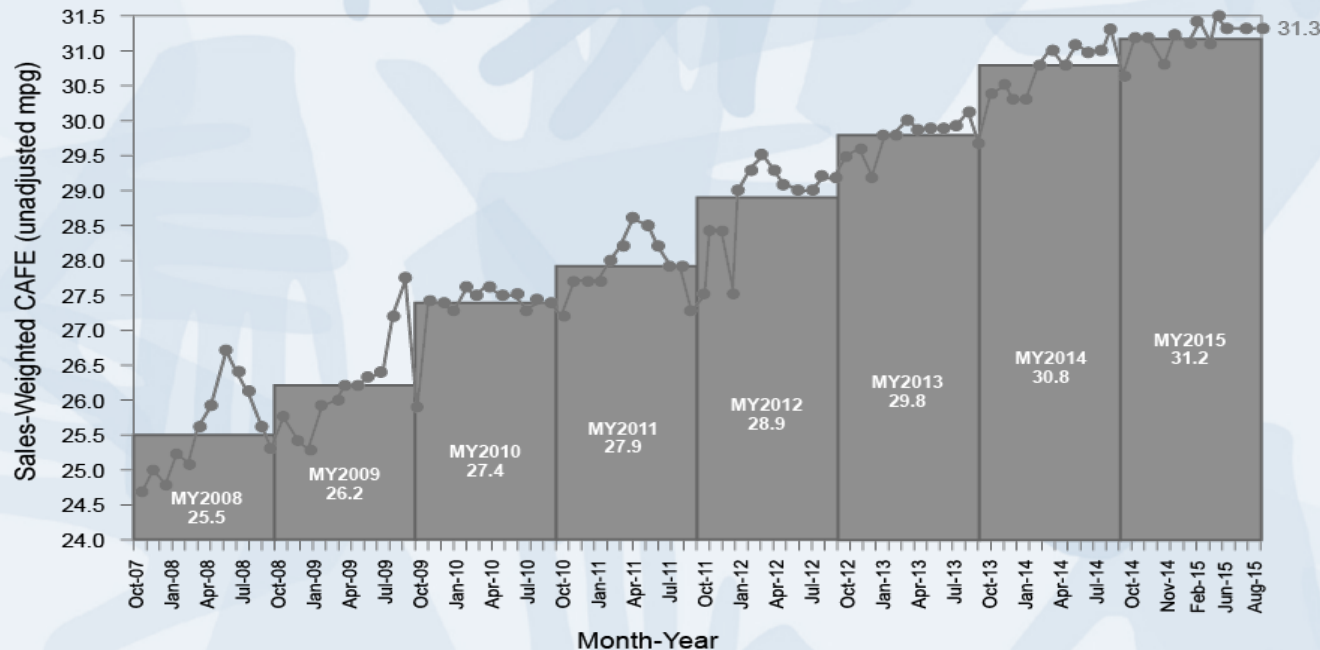
*What We Anticipate Will Happen*

- *New car prices*
- *Used car market*
- *Non-scheduled repairs*
- *Fuel prices*
- *Fuel economy*

# Fuel Economy

## 🏠 Corporate Average Fuel Economy

- Requires Manufacturers to improve fuel economy between 3.5% and 5% every year through 2025
- Buyer preferences for SUVs and trucks are making it hard for automakers to hit the 54.5 MPG CAFE requirements by 2025.



Source: Michael Sivak and Brandon Schoettle  
University of Michigan Transportation Research Institute, [http://www.umich.edu/~umtrisiwt/EDI\\_sales-weighted-CAFE.html](http://www.umich.edu/~umtrisiwt/EDI_sales-weighted-CAFE.html)

Since 2007  
MPG is up

**26%**

for all vehicles

### CAFE Requirements *2017 thru 2025*

Passenger Cars  
Average from 34.1 to 54.5

Light Trucks\*  
Minimum average of 30.2  
MPG

### CAFE Requirements *thru 2016*

Passenger Cars  
33.3 to 37.8 (4.5 MPG)

Light Trucks\*  
25.4 to 28.8 (3.4 MPG)

# Fuel Miles per Gallon

*Newer Efficient Models vs Older Less Efficient Models*



Assuming an Avg. PPG of \$2.50 and 3% inflation increase per year  
Assuming Annual mileage of 25K per Year

# Replacement Analysis

*New Vehicle 4 Years vs. Existing Vehicle 4 More Years*

**New Vehicle**

**\$36,593**

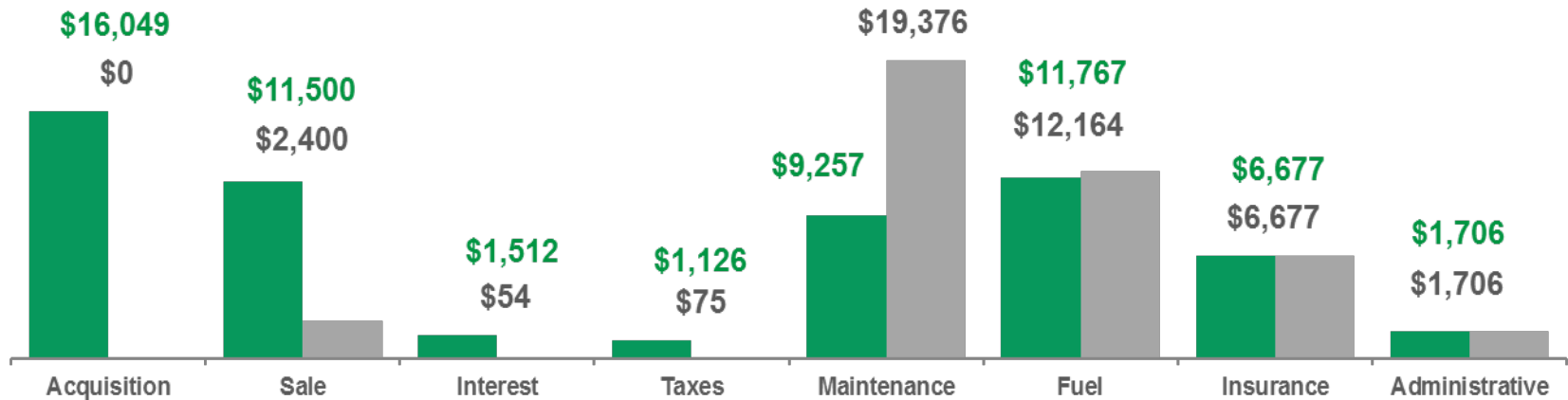
**Existing Vehicle**

**\$37,652**

**Ford F-150  
4 Years  
100,000 miles**

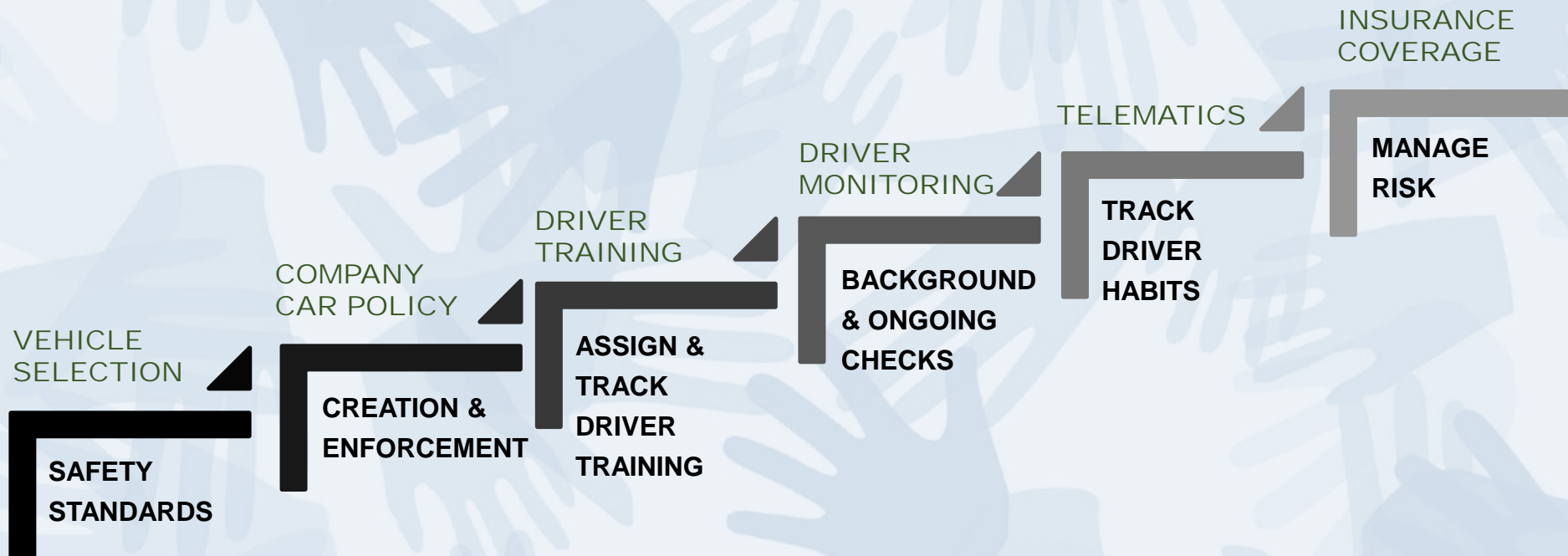
**Savings per Vehicle**

**\$1,059**



# Safety

## *Professional Programs*



# Administrative

## *Benefits of a Managed Fleet Solution*

- **Vehicle Logistics**
  - Determine right time to buy and sell
  - Manage the vehicle purchase process
  - Manage the aftermarket process
  - Coordinate vehicles in and out of service
  - Manage the vehicle resale process
- **License & Title Compliance**
- **Recall Management**
- **Driver Training and Safety**
- **Reporting**

National Avg. Salary for a full-time  
Fleet Manager:  
**\$58,207**



# Outsourcing Fleet Management

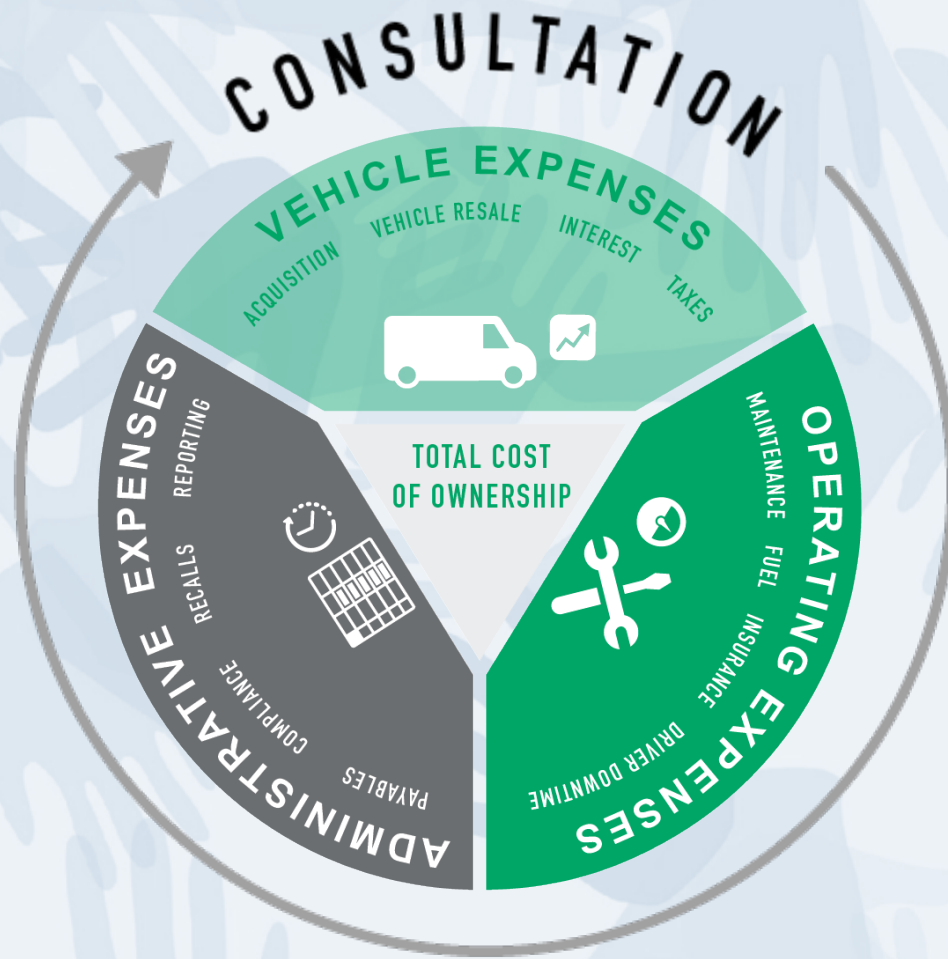
## *Questions to Ask*

- **What is the total annual spend for Total Cost of Ownership?**
- **Is there a strategy in place if fuel prices rise significantly or used car prices drop drastically?**
- **Are there any plans or expectations specific to driver safety?**
- **Is the administrative time and effort being spent to manage the fleet an appropriate use of business resources?**

**Think of an existing client with a fleet of vehicles and ask these questions.**

# Total Cost of Operating a Vehicle

## *Benefits of a Managed Fleet Solution*





**Questions?**  
*Thank you.*