

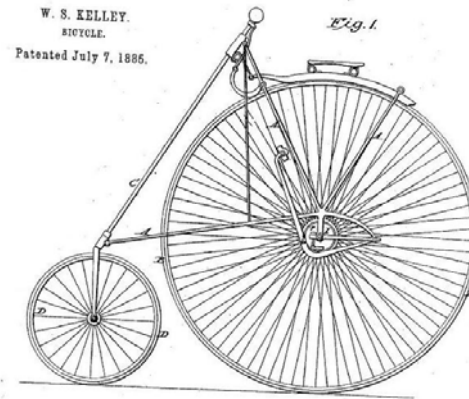
# Tools for a Sustainable Motor Fleet



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# What is a sustainable motor fleet?

- One version is to purchase only the following:



# What is a sustainable motor fleet?

- Here is another version:

## **ARTICLE 19 -- FUEL-EFFICIENT VEHICLES**

When the Town purchases motor vehicles for its municipal operations, each vehicle purchased must be the most fuel-efficient model available that will fulfill the intended municipal function; provided that the vehicle also meets other normal procurement criteria, including price and reliability.

*Source: Town of Arlington, MA*

# Our Story

- How the School of Government moved to a greener car fleet



# Our Analysis

- Cost
- Safety
- Environment
- Functionality
- Driver Preferences

# Cost

- Cost of Vehicle
  - Best source is your local dealers
  - Kelly Blue Book:  
<http://www.kbb.com/>
  - Lease from State Motor Pool:  
<http://www.ncmotorfleet.com/>



# Cost

- Cost of Insurance
  - Your government's insurer
  
- Cost of Maintenance
  - Vincentric  
<http://vincentric.com>



# Cost

- Gasoline

- Fuel Efficiency of Vehicle:

- <http://fueleconomy.gov>

- Cost of Gasoline:

- <http://www.fuelgaugereport.com/NCavg.asp>





# Safety

- The National Highway Traffic Safety Administration rates vehicles on frontal impact, side impact and rollover safety

<http://www.safercar.gov>

# Environment

- The Fuel Economy website has both the carbon footprint and the Air Pollution Score

<http://www.fueleconomy.gov/>



# Functionality and Driver Preference

- These factors will vary depending on your government
- We recommend that you survey your employees

# Cost and Carbon Calculator

- Visual, side-by-side comparison tool

[www.efc.unc.edu/tools.htm#car](http://www.efc.unc.edu/tools.htm#car) and carbon

**Annual Cost and Carbon Calculator**

**Vehicle 1**  Purchase  Lease

Type of Vehicle: Dodge Caravan

MPG: City 17 Highway 21

Monthly Per-Mile Lease Rate: \$0.26

Monthly Minimum Miles: 1,050

**Key Assumptions**

Miles Driven Per Year: 18,400

Number of Vehicles: 1

% City Miles: 50% % Highway Miles: 50%

Gasoline Price: \$3.83

**Vehicle 2**

Type of Vehicle: Toyota Prius

MPG: City 48 Highway 51

Monthly Per-Mile Lease Rate: \$0.26

Monthly Minimum Miles: 1,050

# The Conclusion of our Story

- The School of Government has applied for hybrids to replace some of our vans
- But...we are on a waiting list



# Questions?

**Annual Cost and Carbon Calculator**

**Vehicle 1**  Purchase  Lease  
Type of Vehicle   
MPG City  Highway   
Monthly Per-Mile Lease Rate   
Monthly Minimum Miles

**Key Assumptions**  
Miles Driven Per Year   
Number of Vehicles   
% City Miles  % Highway Miles   
Gasoline Price

**Vehicle 2**  
Type of Vehicle   
MPG City  Highway   
Monthly Per-Mile Lease Rate   
Monthly Minimum Miles



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