

**YOUR
KEYS ARE
WAITING**

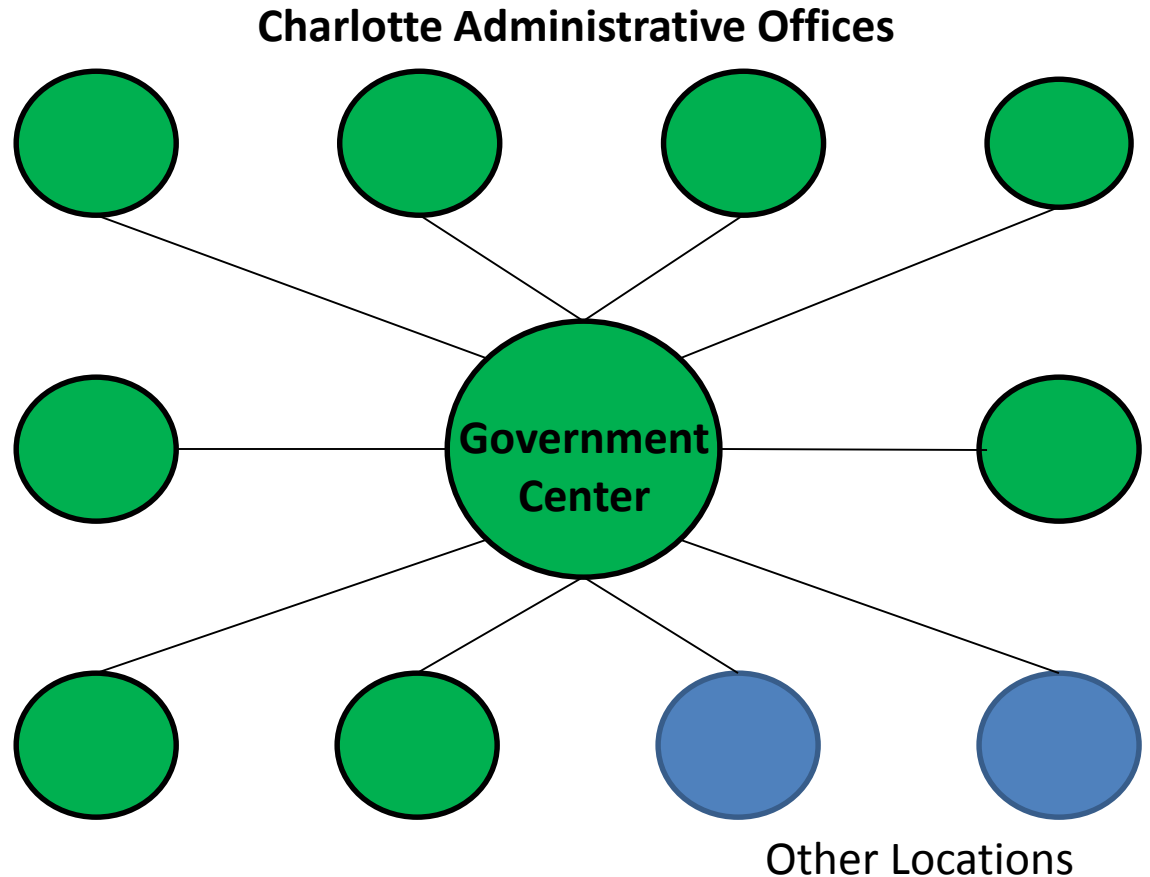


THE CASE FOR MOTOR POOL

Charlotte's Decision to Implement a Motor Pool

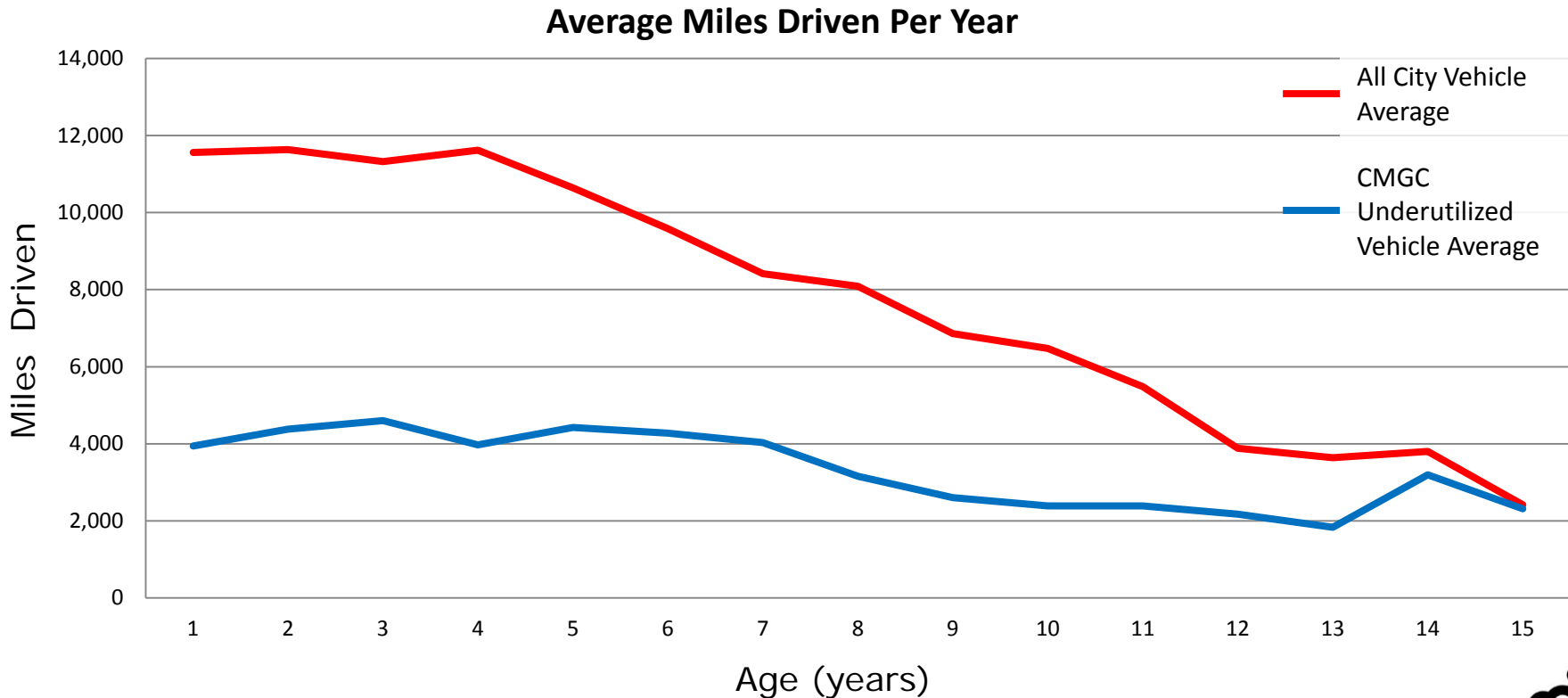
Background

- Large City Organization
- Departments Manage Their Own Assets
- Government Center Headquarters 8 Departments Administrative Offices
- 700 Employees at Government Center



Background

Utilization of vehicles housed at the Government Center Deck was significantly lower than the average utilization of other city assets

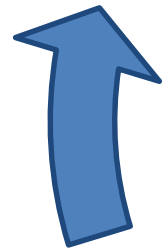


Background

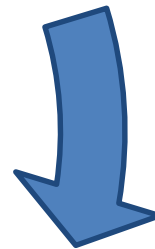
**Underutilized
Vehicles**



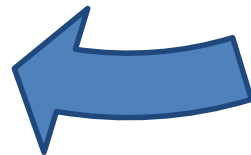
**Low vehicle
turnover**



**Increase in
Mileage
Reimbursement**



Aging Fleet



There Is a Better Way!

Potential Options	Pro	Con
Business as Usual <ul style="list-style-type: none"> • Make no Changes 	<ul style="list-style-type: none"> • No Change Management 	<ul style="list-style-type: none"> • Increasing mileage reimbursements • Underutilized vehicles • High green house gas emissions
Motor Pool <ul style="list-style-type: none"> • New System of Shared Vehicles 	<ul style="list-style-type: none"> • Decrease in Reimbursements • Fuel Efficient Fleet • Improved Branding • High Vehicle Utilization 	<ul style="list-style-type: none"> • High Start Up Cost Potential • Hire Employee to Manage System • Unknown Vehicle Availability
Eliminate Government Center Vehicles <ul style="list-style-type: none"> • Employees Drive Personal Vehicles 	<ul style="list-style-type: none"> • Remove Underutilized Vehicles 	<ul style="list-style-type: none"> • Increased Mileage Reimbursement • Unknown Green House Gas Emissions • Many Employees Use Public Transportation
Car Share <ul style="list-style-type: none"> • Partnership with Enterprise for Public / Private car share 	<ul style="list-style-type: none"> • No Start Up Cost • Flexible Number of Vehicles • Cornerstone for Charlotte Car Share Program 	<ul style="list-style-type: none"> • High Per Hour Cost • Logistics of Moving Vehicles • Risk of No Community Support • Negative Perception / Branding



Motor Pool Design

Things to Consider

- **How many Vehicles?**
 - What is the utilization target? How often do you expect them to be used?
- **What do we do with the current (old) Vehicles?**
 - Is there any value in keeping them? If they are not being driven now, will they be driven in the future? -> Shed the baggage, start fresh if you can.
- **What Type of Vehicles are we going to have?**
 - What do we expect people to ask for? Success will be measured on meeting the needs of customers!
- **How do we get people to use the Motor Pool?**
 - Policy requiring Motor Pool use: No Mileage reimbursement unless Motor Pool Vehicle is unavailable
- **How do we pay for it?**
 - How/who will pay for the maintenance of vehicles?
- **Who is going to manage the Motor Pool?**
 - Will be it an additional duty or a full time job?



Motor Pool Design



3 Electric Sedans
(5000 Miles/Yr)



1 SUV 4x4
(10000 Miles/Yr)



7 Hybrid Sedans
(12000 Miles/Yr)



1 Minivan
(8000 Miles/Yr)



1 Pick-Up 4x4
(8000 Miles/Yr)



2 Passenger Vans
(6000 Miles/Yr)

Meet the needs of all customers!



CHARLOTTE.

Motor Pool Design – Keeping it “Fresh”

“Old” Government Center Vehicles are gone!

Motor Pool Vehicles have 36 month Life Cycle

Vehicles Cascaded to Departments after 3 Year Motor Pool Service
(Will fall into replacement cycle for that department)

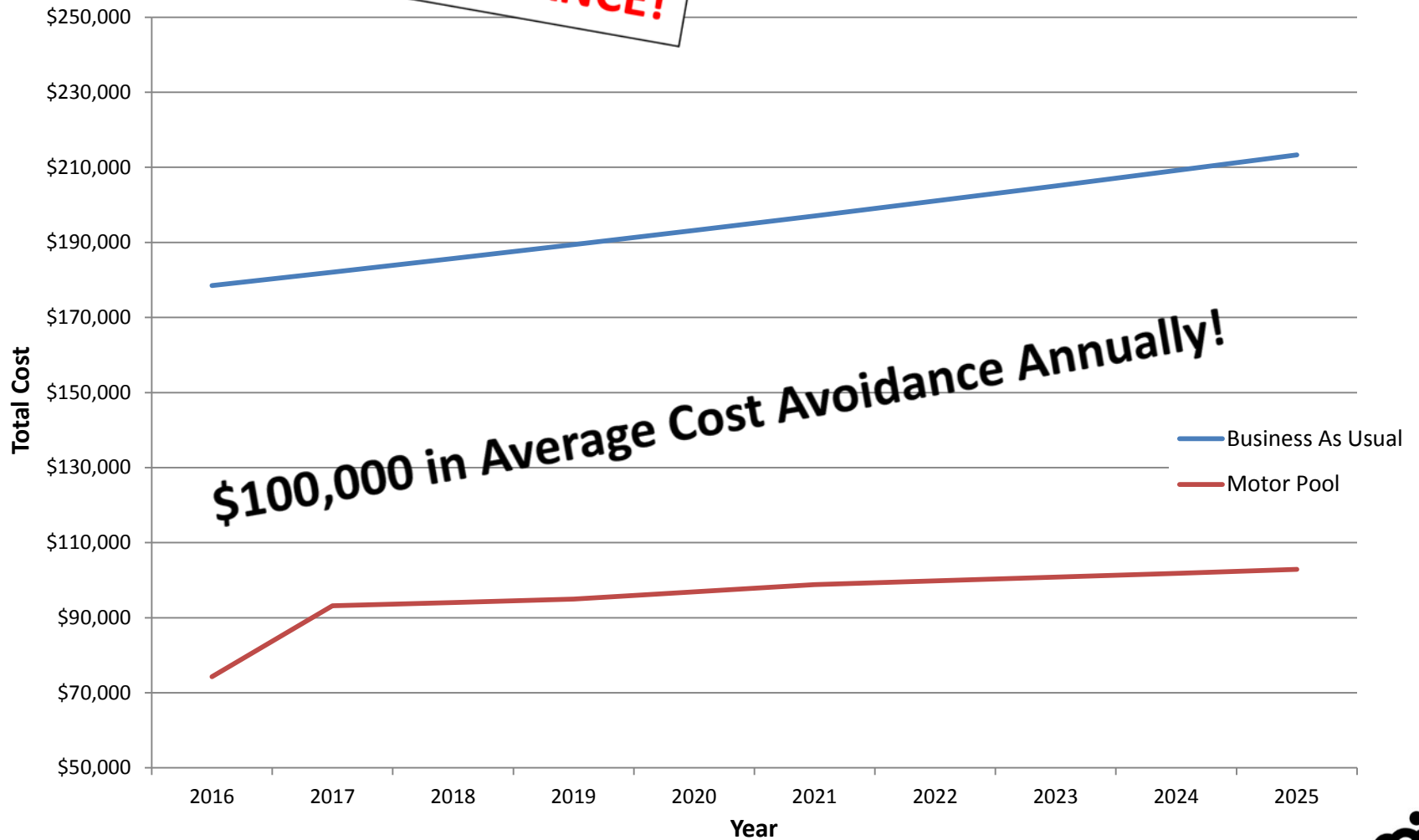
Keeps Age Constant and Operation & Maintenance Cost Predictable

Keeps Vehicles “Fresh” -> People want to drive them!

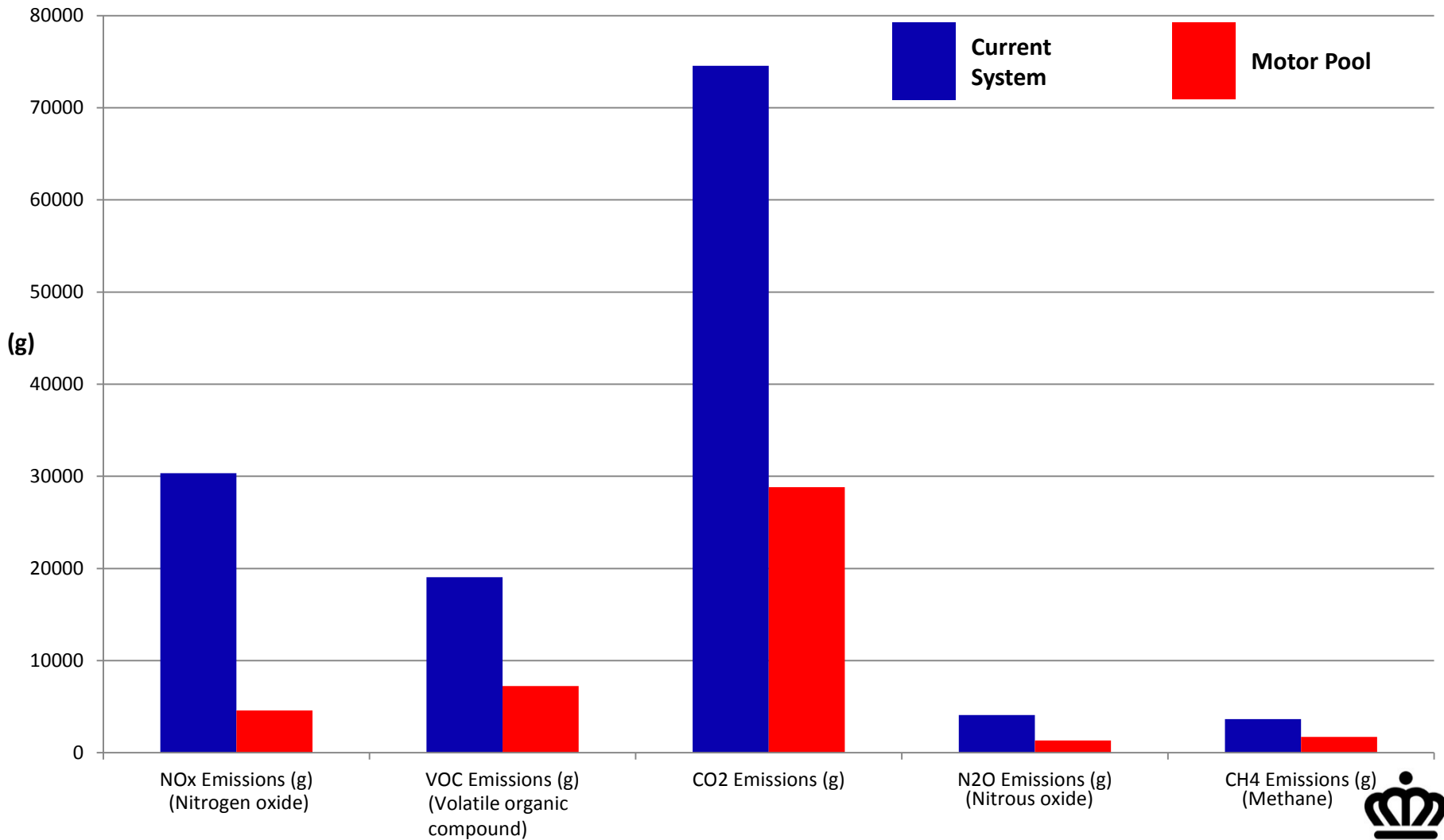


The Cost of Doing Business

AVOIDANCE!



Emissions Output Reduction



Contact Me!

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NC STATE UNIVERSITY MOTOR POOL

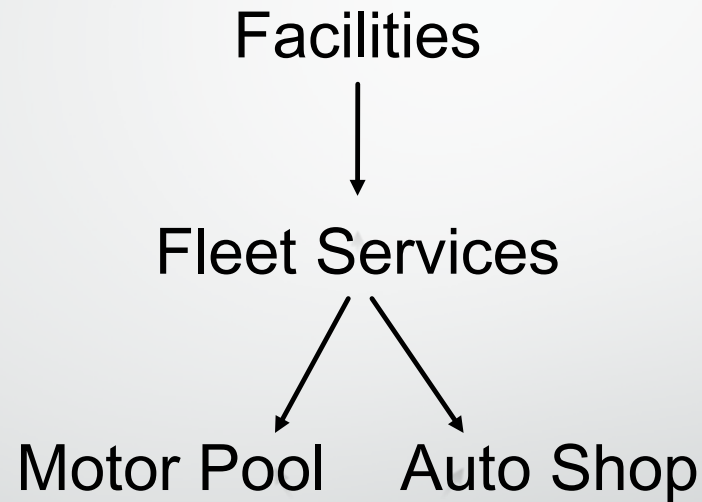


Presentation Outline

- i. Background information
- ii. Fleet Mix
- iii. Rates
- iv. How we come up with our rates
- v. Savings



Organization Chart



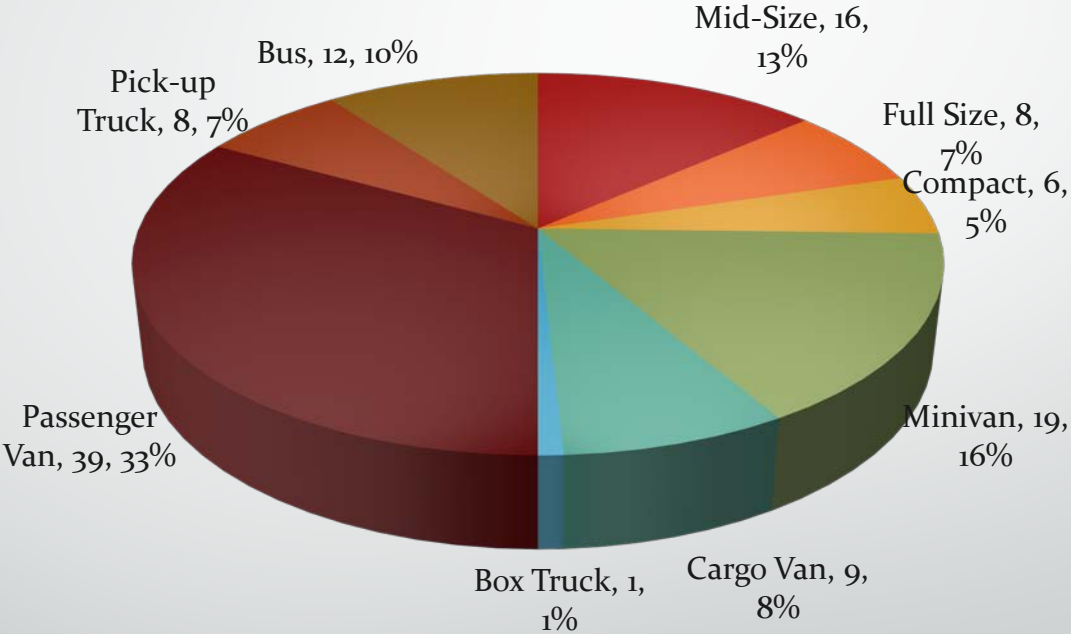
Services offered by Motor Pool

- Rental Vehicles
- Bus/Shuttle Services
- Fuel Island E10, E85 & ULSD
- Manual and Touchless Carwash Bays
- Safe Driver Program



Motor Pool currently has 118 vehicles in it's fleet

Fleet Composition



Motor Pool Rates

Vehicle Class	Mileage	Daily*	Monthly**
Compact	\$0.64	\$38.40	\$672.00
Mid-Size	\$0.66	\$39.60	\$693.00
Full Size	\$0.73	\$43.80	\$766.50
Minivan	\$0.70	\$42.00	\$735.00
Cargo Van	\$0.69	\$41.40	\$724.50
Box Truck	\$0.67	\$40.20	\$703.50
12 & 15 Passenger Van	\$0.75	\$45.00	\$787.50
Pick-up Truck	\$0.67	\$40.20	\$703.50
Bus	\$1.52		
*60 miles minimum			
**1050 miles minimum			



Contributing factors to our rates

- Miles driven
 - Fuel
- Maintenance
- Capital Renewal
- Administrative
- Insurance
- Parking



Vehicle Type	Passenger Vans	Cargo Vans
	\$	\$
Purchase Price (1)	21,013	15,778
Average Miles/Year (2)	7,040	3,218
Capital Renewal		
	\$	\$
Average Cost Amount	21,013	15,778
Mileage 150,000 (3)	150,000	150,000
Depreciation/Mile		\$
	\$	0.14
		0.11
Administrative & Parking Cost		
Administrative Costs	0.30	0.30
Parking Permit Cost	0.04	0.04
Administrative & Parking Cost/Mile		\$
	\$	0.34
		0.34
Liability Insurance		
Liability Insurance 96)	300	300
Insurance/Mile		\$
	\$	0.04
		0.09
Vehicle Maintenance & Repair		
Maintenance & Repair/Mile (5)		\$
	\$	0.07
		0.16
Fuel Cost/Mile		
Average Miles /Gallon	14.0	15.6
Average Cost/Gallon (4)	\$	\$
	2.24	2.24
Fuel Cost/Mile		\$
	\$	0.16
		0.14
		\$



Can someone guess how much
Motor Pool saved NC State
University last year?

Over \$450,000!



Total Cost Savings, FY14-15

Vehicle Class		Savings
Passenger Vans		\$221,533.00
Cargo Vans		\$17,593.00
Box Truck		\$22,313.00
Pick-up Trucks		\$23,065.00
Buses		\$202,757.00
Sedans		-\$33,969.00
Total Savings		\$453,292.00



How did we figure out savings based on size class?

Passenger Vans									
Miles Travelled	# of Res	% of Res	Ave Days Rented	Ave Mileage per Res	ERAC	Motor Pool	Difference	Est. MP Savings	
1-100	926	61.00%	2	30	235.56	100.40	135.16	125,158	
101-200	152	10.01%	3	144	373.57	150.60	222.97	33,891	
201-300	139	9.16%	4	268	514.28	253.72	260.56	36,218	
301-400	147	9.68%	3	326	422.86	518.52	-95.66	(14,062)	
401-500	37	2.44%	5	446	669.62	471.75	197.87	7,321	
501-600	27	1.78%	8	557	1021.07	474.37	546.71	14,761	
601-800	36	2.37%	6	674	838.5	696.84	141.66	5,100	
801-1000	23	1.52%	8	904	1115.05	802.28	312.77	7,194	
1000+	31	2.04%	9	1383	1351.91	1159.92	191.99	5,952	
Totals	1518	100.00%					Savings/(Loss)	221,533	



Questions?

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