Assumptions							
I assumed that Tesla's internal rate of return would be high enough to cover any increase in electric, maintenance or operations costs over the years							
Variables	**Fill your assumptions in here**						
Years	**15.00**						
miles per year	**13,000.00**		US average for cars is just under 12,000				
Percentage of Tesla miles that are "fueled" by Supercharging	**8.00%**						
Miles per KWH Model 3	**3.50**		~18% better than Model S				
Percentage transmission and charging loss	**15.00%**		I think this is a bit high as the Supercharger is supposed to be 92% efficien				
Electricity cost per KWH	**$0.095**		transportation electric cost from https://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_6_a				
Battery Size KWH	**55.00**						
Average percentage of battery charged per Supercharge	**60.00%**						
Hours per day people are normally using Superchargers	**16.00**		Assume all supercharging done during a sixteen hour period each day				
Ratio of time slots used before frequent waits	**50.00%**		Assume you need 2 available slots for each actual use to limit waiting				
Average Supercharge time (minutes)	**30.00**		Assume 30 minute average Supercharger time				
Cost to build a Supercharger	**$150,000.00**						
Operating & maintenance costs per super charger per year	**$3,000.00**		This is a complete guess				
Electricity cost							
years	15.00						
miles per year	13,000.00						
Lifetime miles	195,000.00						
Supercharger miles	15,600.00	8.00%					
Supercharger KWH	4,457.14	3.50					
transmission and charging loss	668.57	15.00%					
Total KWH needed	5,125.71						
Electricity cost per car	**$486.94**	$0.095					
Capital cost							
miles per year	13,000.00						
Supercharger miles	1,040.00	8.00%					
Supercharger KWH	297.14	3.50					
KWH per charge	33.00						
number of supercharges per car per year	9.00						
number of slots available per year per supercharger	5,840.00						
number of cars a supercharger can support	648.58						
cost of 1 supercharger	$150,000.00						
capital cost per car	**$231.28**						
operating & maintenance costs							
operating & maintenance costs per super charger per year	$3,000.00						
years	15.00						

total 15 year operating an maintenance cost per supercharger	$45,000.00						
number of cars a supercharger can support	648.58						
total 15 year operating an maintenance cost per car	**$69.38**						
Total 15 year (assumed lifetime) Supercharger cost per car	**$787.60**						