
Time Permit Rate for Pilot

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Agenda Item #10
TAC Meeting #10, October 23, 2015
Oakland, CA



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Participant Choices

Pay only for miles driven on CA roads

- Off-road and out-of-state miles are free
- GPS required

Pay for all miles you drive

- Technology optional
- GPS not required

Pay upfront for all-you-can-drive

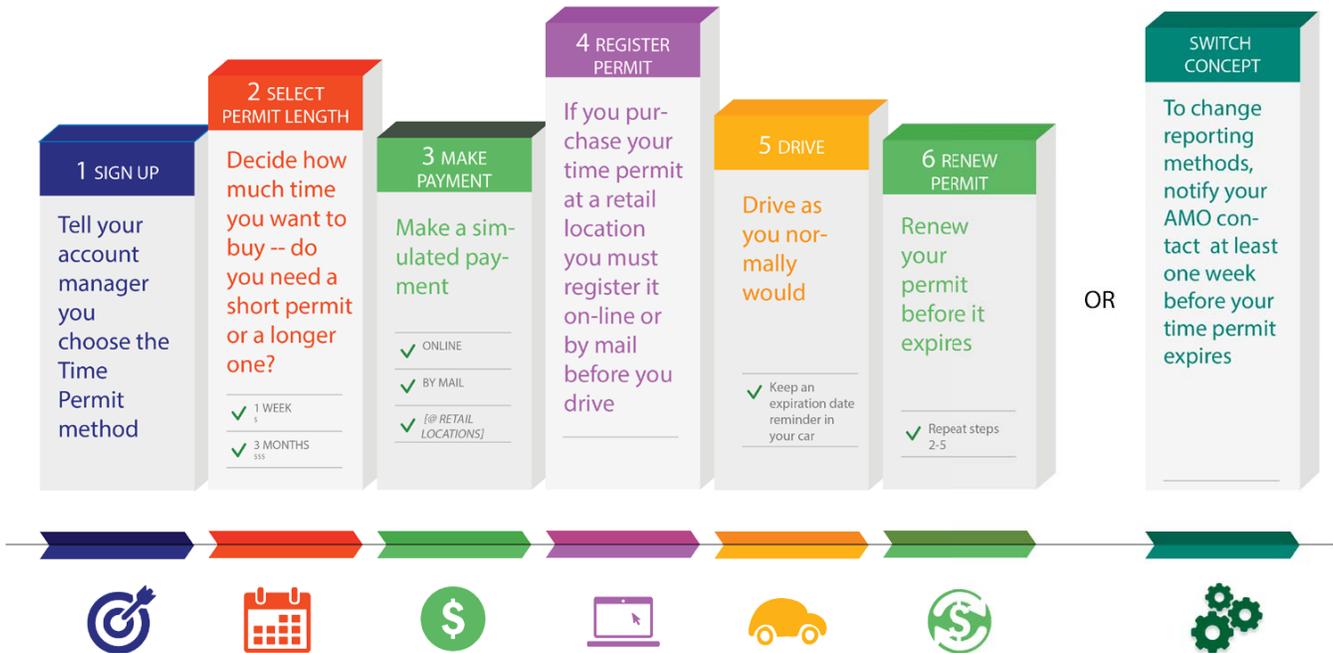
- Price equivalent to Xth percentile mileage
- Mileage reporting not required



TIME PERMIT INSTRUCTIONS



TAB 10



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16

TAB 10

Time Permit Rate Considerations for a Real System

- ◆ The time permit addresses privacy and out-of-state drivers
 - ◇ A choice for motorists who prefer not to account for or disclose their annual mileage traveled
 - ◇ A choice for visitors who prefer not to account for or report their mileage traveled in California
- ◆ All motorists retain the option of paying based on miles traveled
 - ◇ Possible exception: antique vehicles with non-functional odometers
- ◆ Options for setting the time permit rate in a real system:
 - ◇ Calculated based on a specified equivalent mileage percentile
 - ◇ Determined through political negotiation



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17

Example Rate Setting

- ◆ Set the time permit rate at California median mileage (50th percentile):
 - ◇ Assume a road charge per-mile rate of 1.5 cents per mile
 - ◇ Median mileage traveled is 8,600 miles
 - ◇ Time permit rate = $\$0.015 \times 8,600 = \129.00

- ◆ Set the time permit rate at 90th percentile California mileage:
 - ◇ Assume a road charge per-mile rate of 1.5 cents per mile
 - ◇ 90th percentile mileage is 19,900 miles
 - ◇ Time permit rate = $\$0.015 \times 20,000 = \298.50



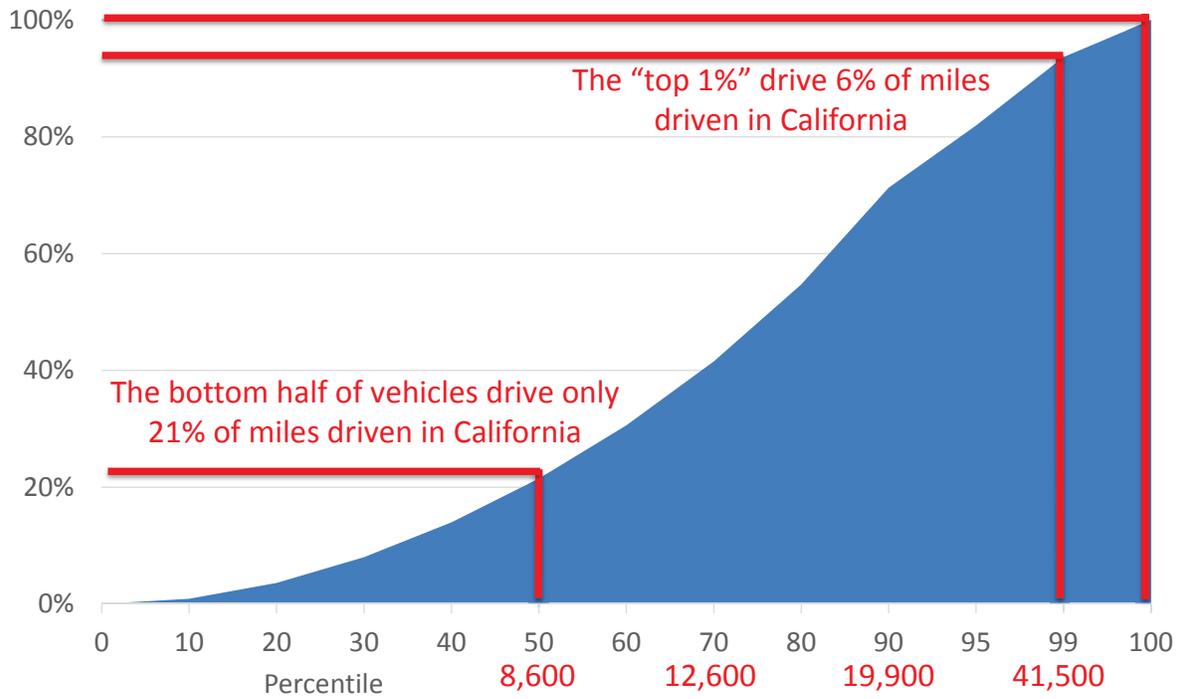
Time Permit Rate Considerations for a Real System ^{TAB 10} (continued)

- ◆ Implications of setting the rate at median (50th percentile) mileage
 - ◇ Motorists who predict they will travel more than the median will purchase the time permit
 - ◇ Motorists who predict they will travel less than the median will pay by the mile
 - ◇ In this scenario, gross revenue would be substantially lower than if everyone paid by the mile (~37% lower)

- ◆ Implications of setting the rate above median mileage
 - ◇ There are fewer motorists who travel above the mileage at which the rate is set
 - ◇ Likelihood improves of capturing actual miles traveled for more drivers, reducing revenue loss and matching gas tax revenue
 - ◇ If set prohibitively high, there could be objections



Cumulative Annual Miles Driven in California by Percentile ^{TAB 10}

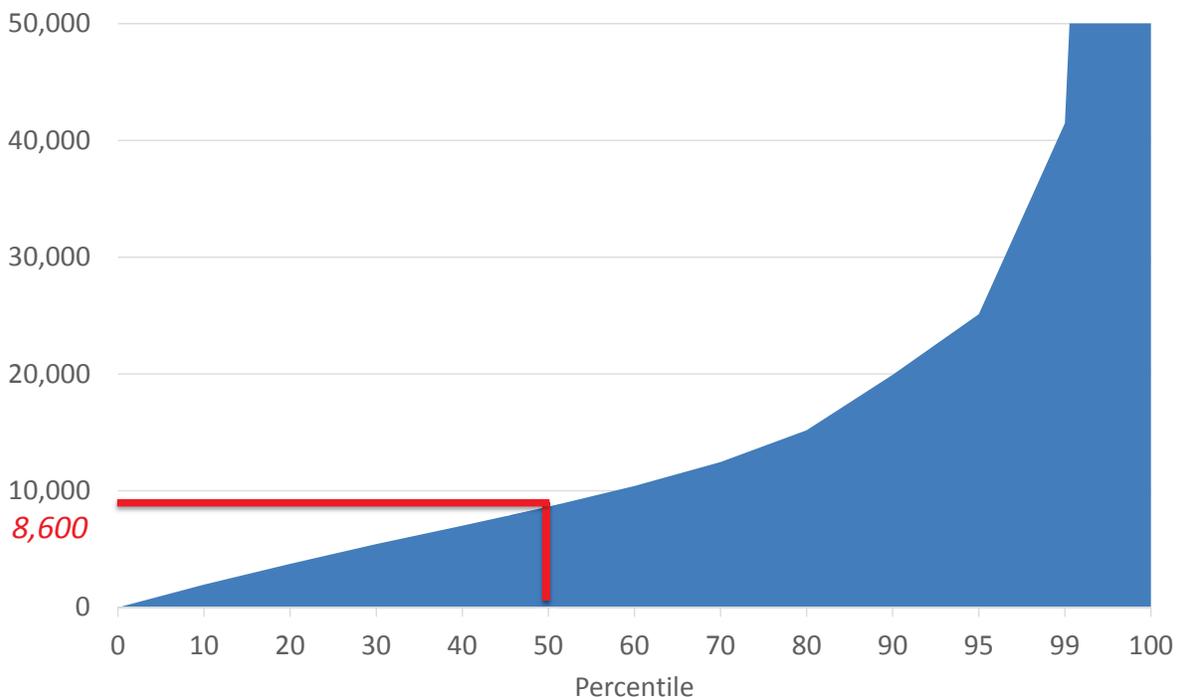


Source: Consultant Analysis of California Data from National Household Travel Survey



TAB 10

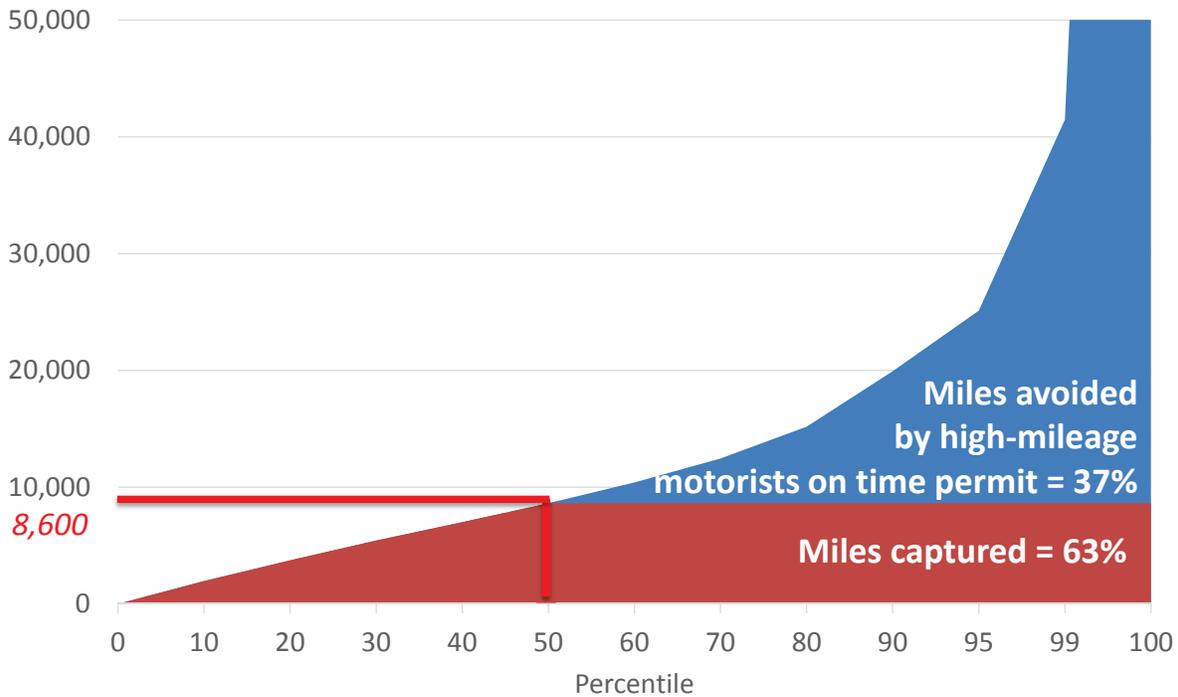
Annual Miles Traveled by Percentile



Source: Consultant Analysis of California Data from National Household Travel Survey



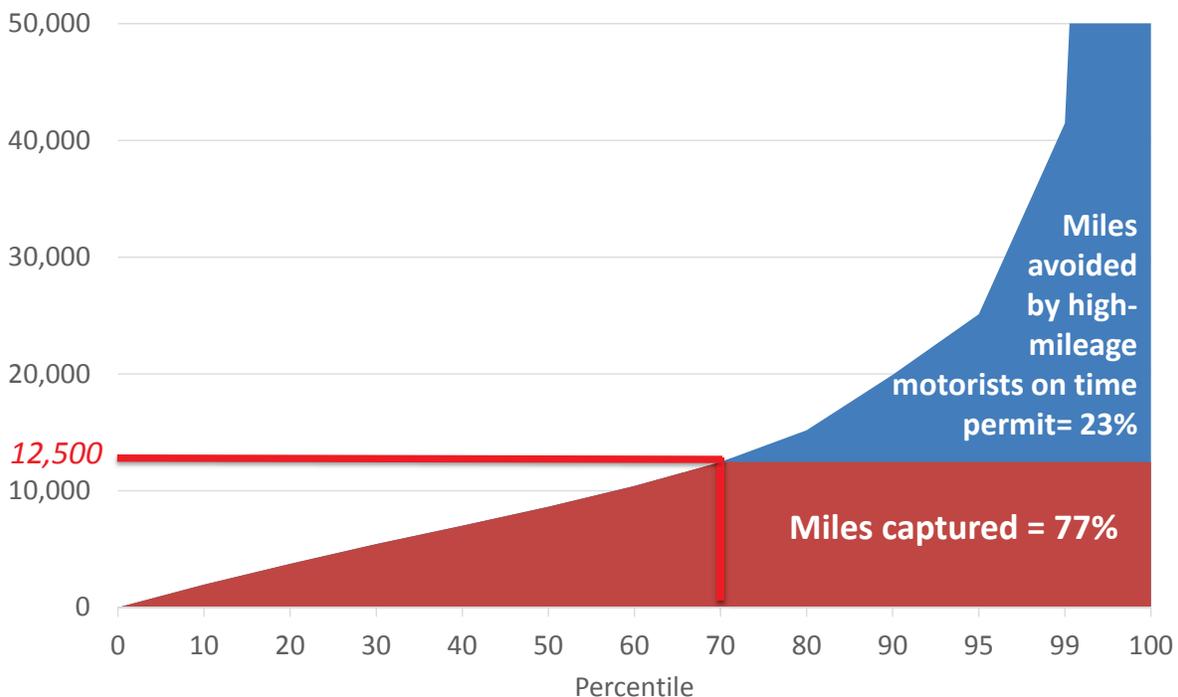
Set Time Permit at 50th Percentile (Median) = 8,600 miles TAB 10



Source: Consultant Analysis of California Data from National Household Travel Survey



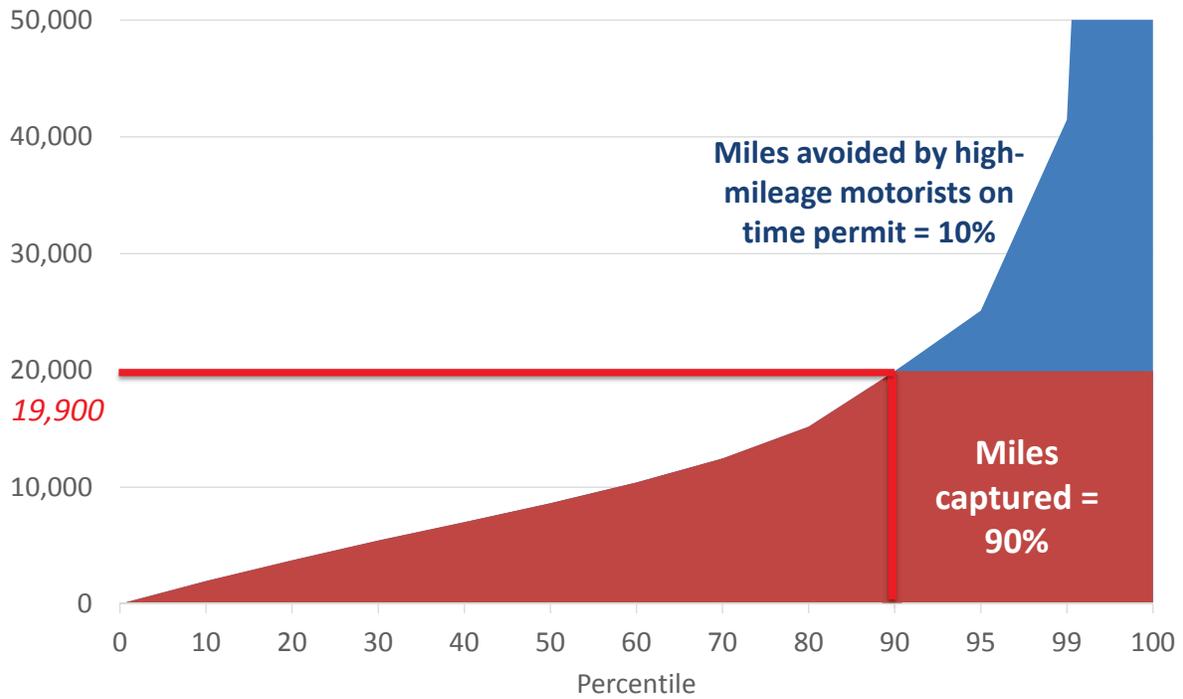
Set Time Permit at 70th Percentile (12,500 miles) TAB 10



Source: Consultant Analysis of California Data from National Household Travel Survey



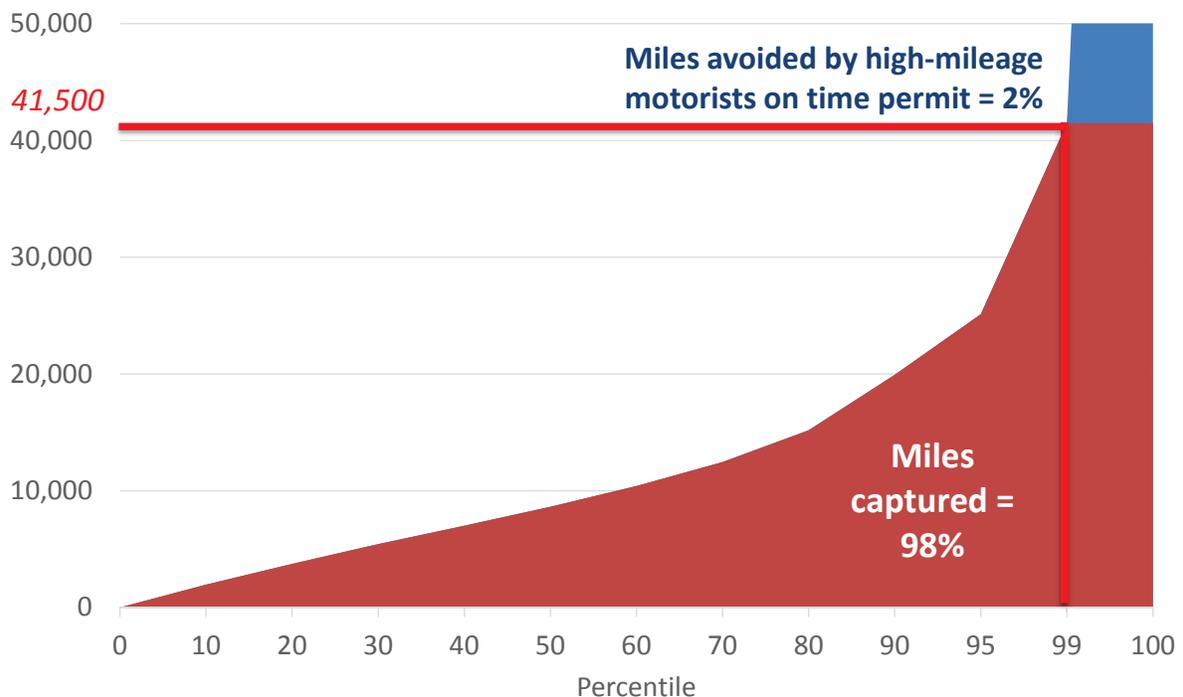
Set Time Permit at 90th Percentile (19,900 miles)



Source: Consultant Analysis of California Data from National Household Travel Survey



Set Time Permit at 99th Percentile (41,500 miles)



Source: Consultant Analysis of California Data from National Household Travel Survey



Additional Time Permit Rate Considerations for the Pilot TAB 10

- ◆ No money will actually change hands
- ◆ The cost of the time permit will be displayed when participants make their choice, and the cost may impact choices
- ◆ Participants will be surveyed about various aspects of the pilot, including their opinions about and reactions to rates
- ◆ The advertised cost to the user will vary depending on the time denomination. Assume the pilot offers 90-day and 10-day permits:
 - ◇ Suppose a 90-day permit costs \$90
 - ◇ If proportional, then a 10-day permit would cost \$10



Setting the Base Time Permit Rate for One Year TAB 10

| Percentile | Mileage | Potential mileage avoided by high-mileage drivers |
|--------------|---------|---|
| 50% (Median) | 8,600 | 37% |
| 60% | 10,400 | 29% |
| 70% | 12,500 | 23% |
| 80% | 15,200 | 16% |
| 90% | 19,900 | 10% |
| 95% | 25,100 | 6% |
| 99% | 41,500 | 2% |

Source: Consultant Analysis of California Data from National Household Travel Survey

