



# Critical Factors for Active School Travel among Low-Income and Minority Students

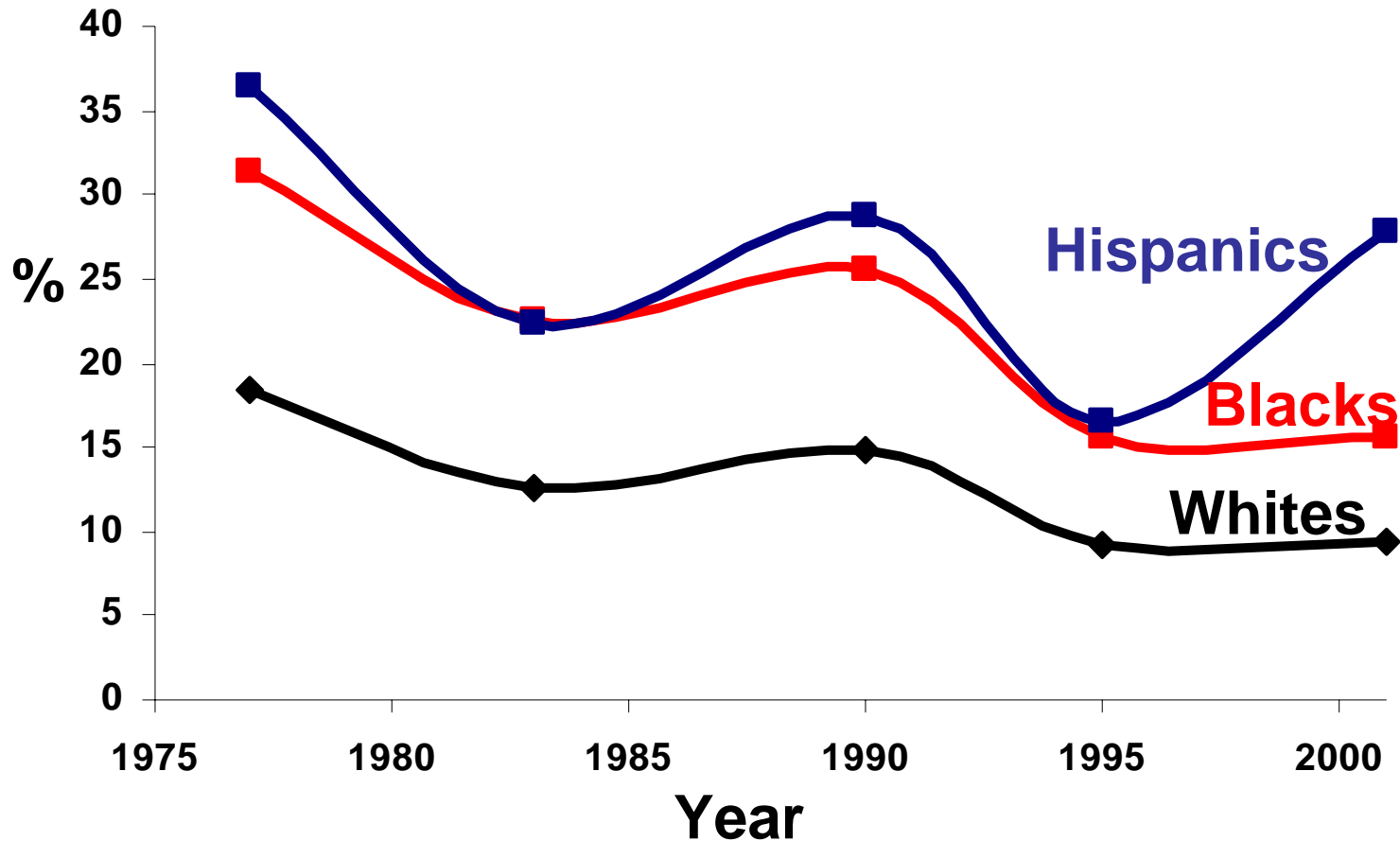
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# Research Questions

- What are the rates of active transportation by race and income?
- What factors account for differences in rates?
  - Behavioral
  - Structural

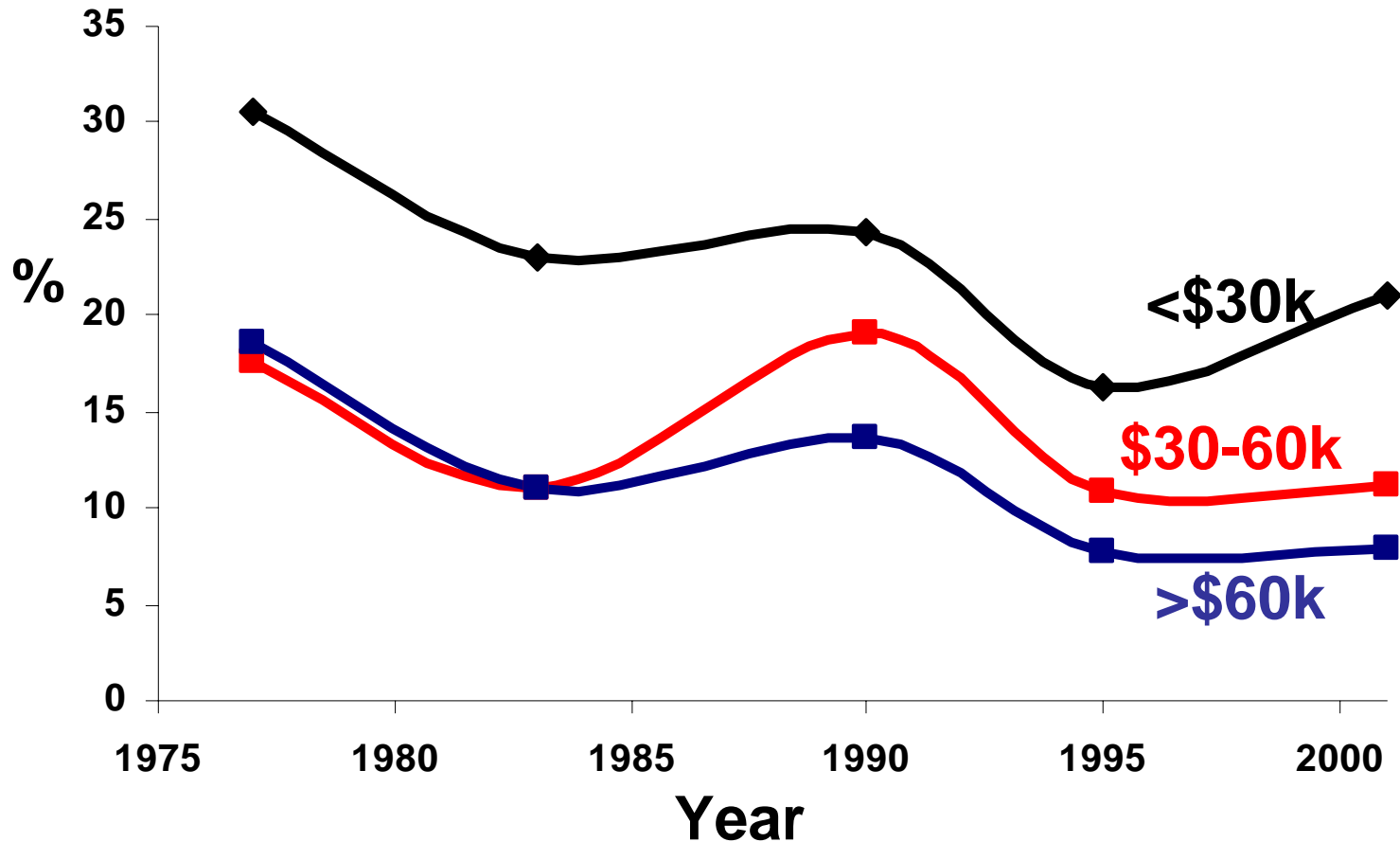
# Background: Race

## Walk/Bike Mode Share



# Background: Income

## Walk/Bike Mode Share

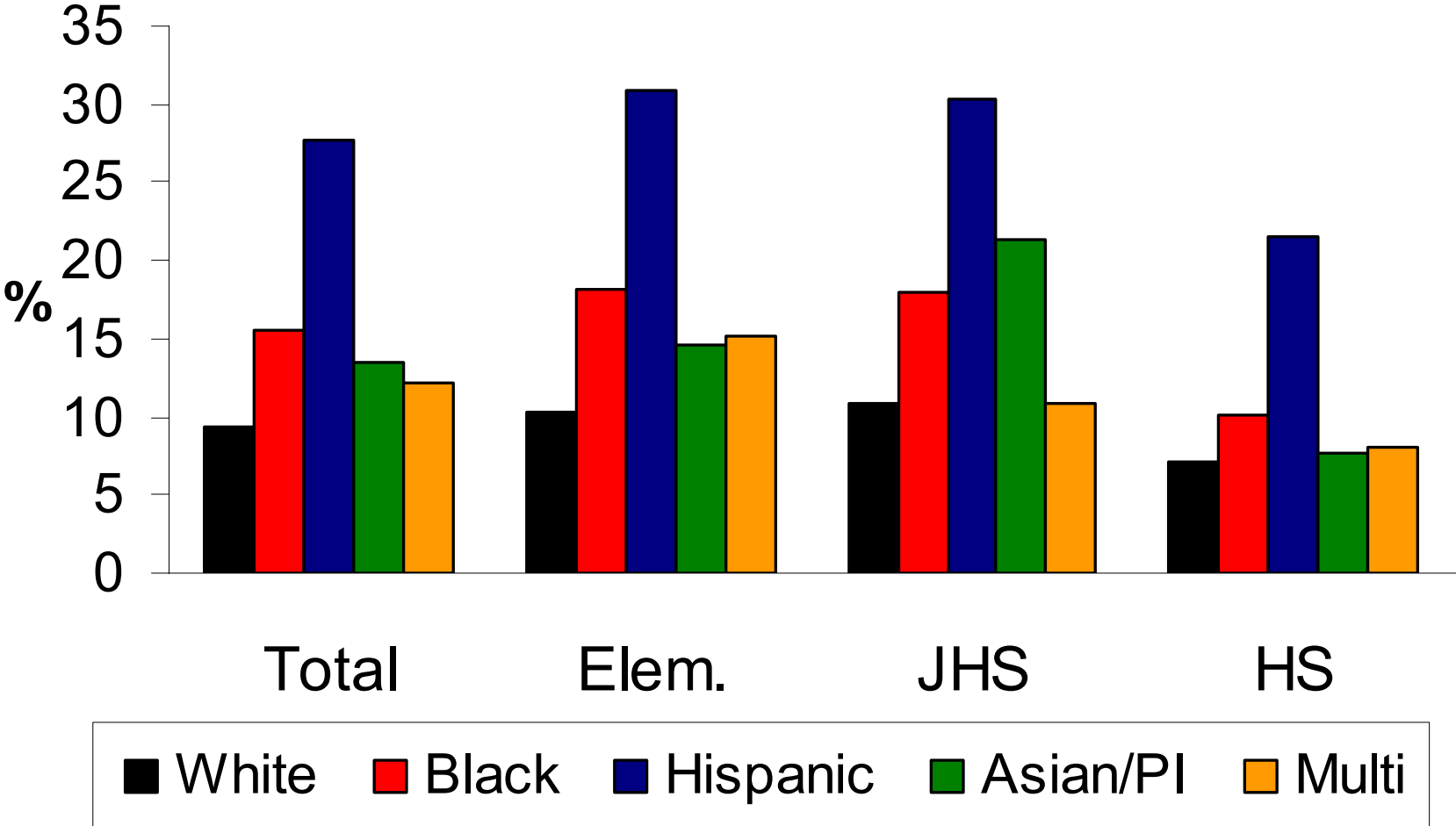


# Sample Characteristics

- 64% white
- 15% black
- 15% Hispanic
- 26% incomes less than \$30,000
- 37% incomes greater than \$60,000
- 11.4 years old

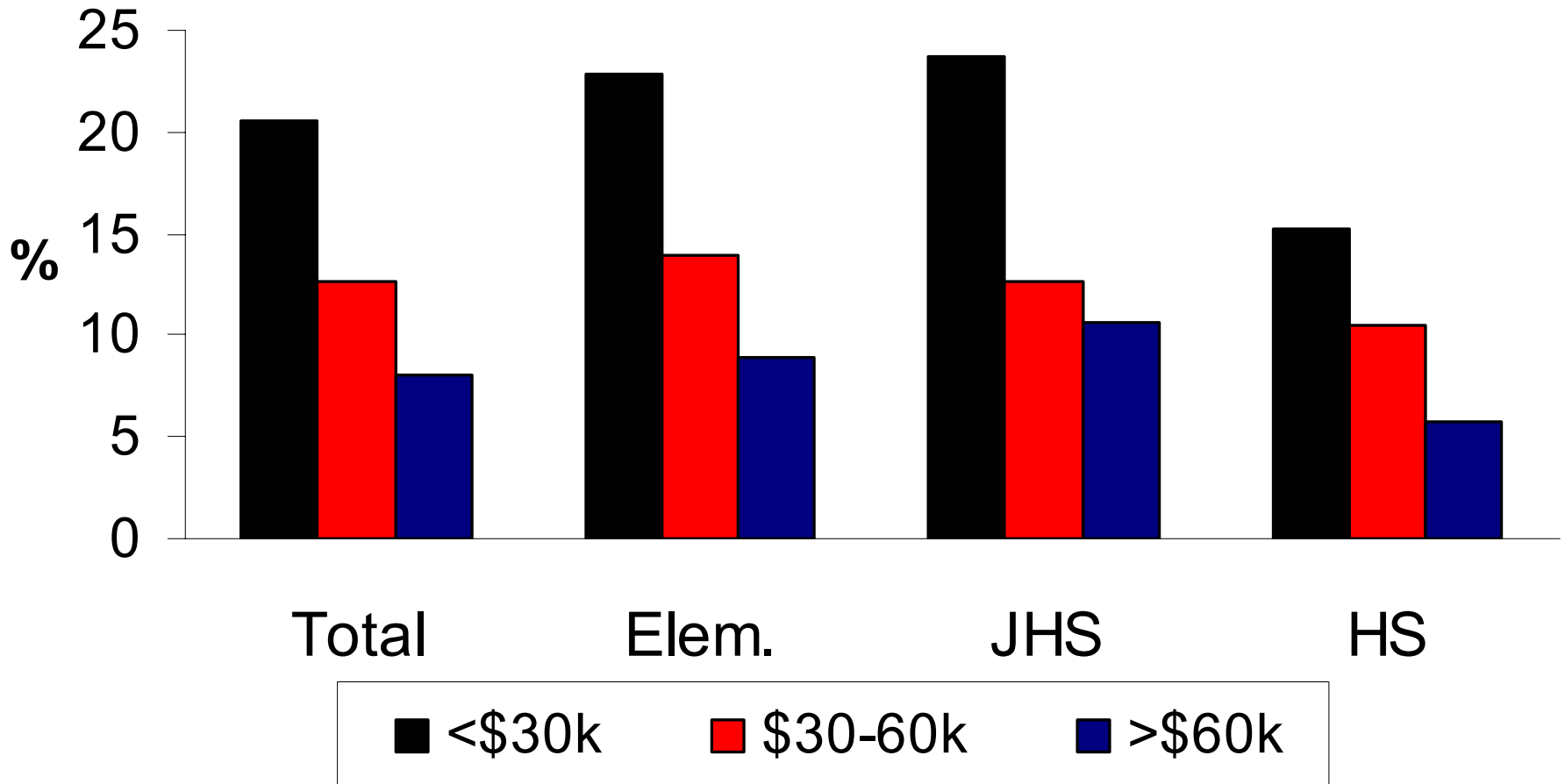
# Today: Race

## Walk/Bike Mode Share



# Today: Income

## Walk/Bike Mode Share



# Model Results

	White	Black	Hispanic
Distance			
Less than 1 Mile	<b>103.26</b>	<b>483.94</b>	<b>26.94</b>
1-2 Miles	<b>9.36</b>	15.36	<b>3.69</b>
2+ Miles [Reference]	1.00	1.00	1.00
Age	<b>1.13</b>	1.18	<b>1.08</b>
Licensed Driver	<b>0.27</b>	0.15	0.16
Female	0.87	0.93	0.66
Ln(Income)	<b>0.72</b>	1.23	0.87
HH Vehicles per Driver	0.89	1.47	1.46
Median Year Built before 1940	1.27	0.76	1.22
Density (1,000 ppl/mi <sup>2</sup> )			
<4 [Reference]	1.00	1.00	1.00
4-10	<b>1.48</b>	1.73	1.30
10-25	1.80	<b>5.98</b>	<b>3.29</b>
>25	2.79	<b>5.88</b>	<b>2.66</b>
Neighborhood Disadvantage <sup>2</sup>	1.05	0.98	1.07



# Model Results

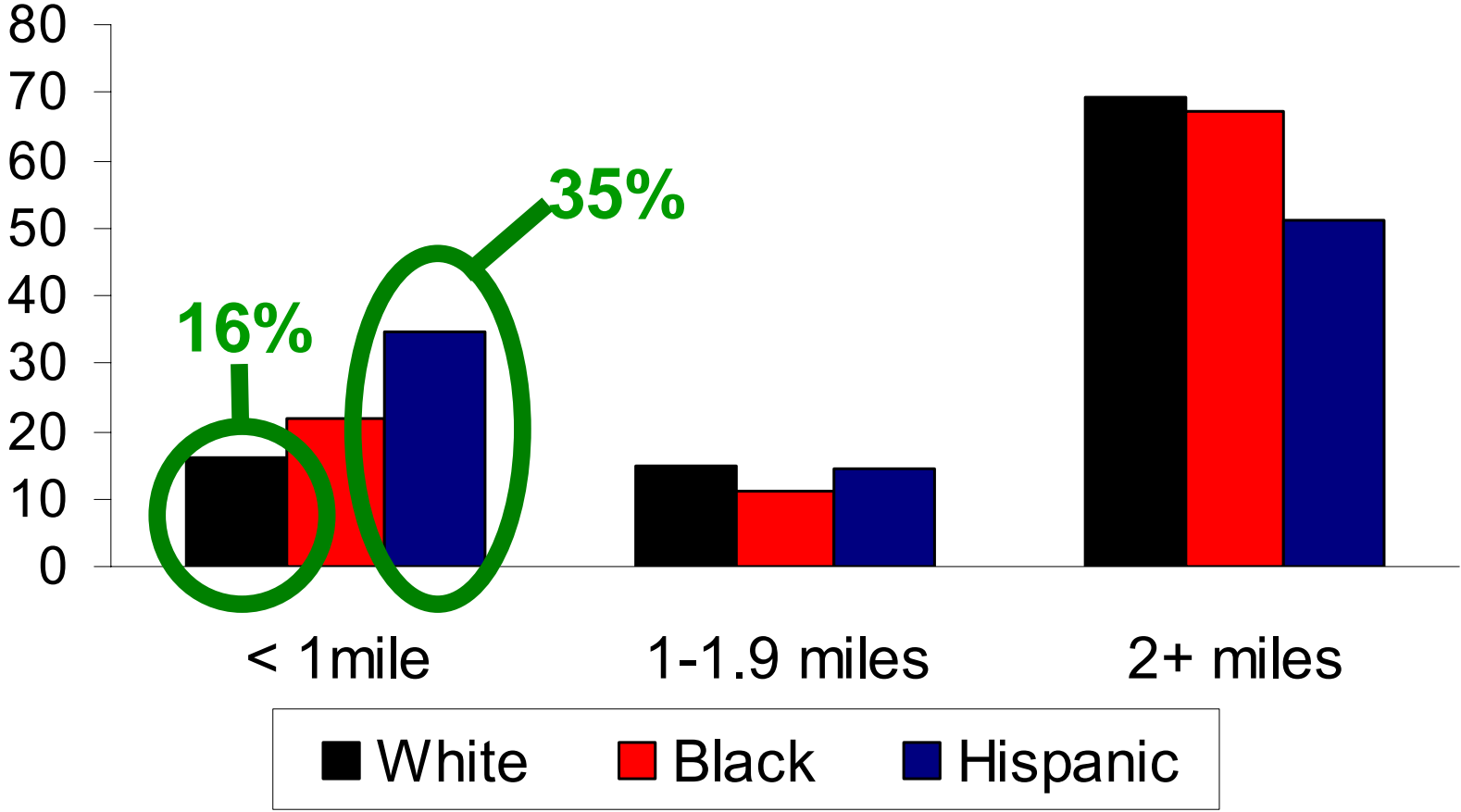
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# Predicted Probabilities: Distance

## Predicted Walk/Bike Mode Share

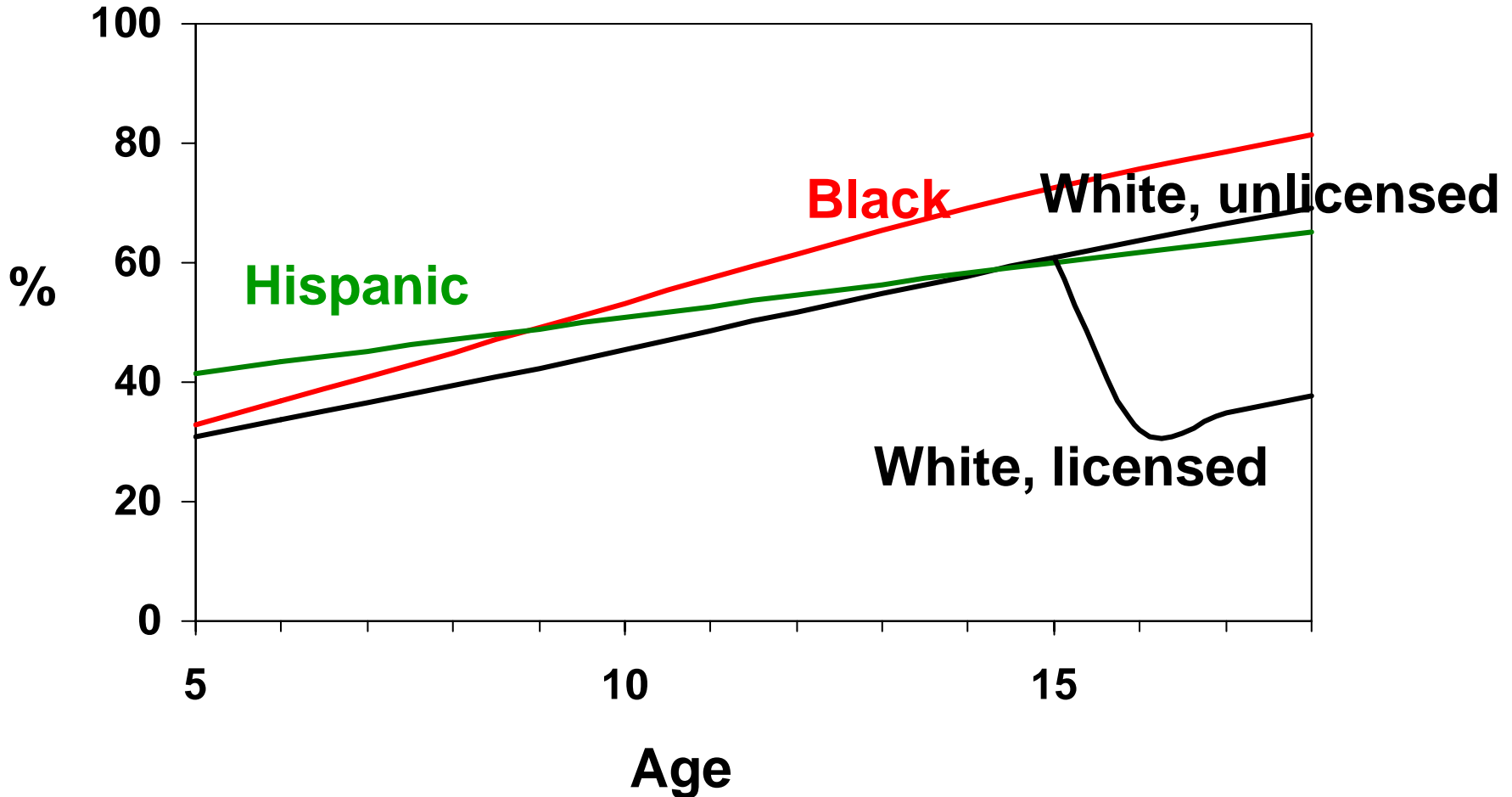
	<b>White</b>	<b>Black</b>	<b>Hispanic</b>
<1 mile	50	59	53
1-1.9 miles	8	4	14
≥2 miles	1	0	4

# Pop'n Dist. by Distance to School



# Age & Driver Status

Predicted Walk/Bike Mode Share



# Predicted Probabilities: Density

## Predicted Walk/Bike Mode Share

People per Sq Mile	<b>White</b>	<b>Black</b>	<b>Hispanic</b>
<4,000	50	59	53
4-10,000	59	71	60
10-25,000	64	90	79
>25,000	73	89	75

# Results Summary

- Sharp differences in rates of active transportation to school by race and income
- Large proportion of difference explained by structural factors
  - Different distance to school, incomes

# Policy Implications

