

# Influence of Mass Rail Transit on Residents' Travel Behavior

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## Background

→ In Chinese big cities

As the city sprawls...



Huge travel demand



Motorization Time is Coming

To meet the travel demand

To restrain car increase

Mass Rail Transit (MRT) has been mass constructed or planned in several Chinese cities in recent years

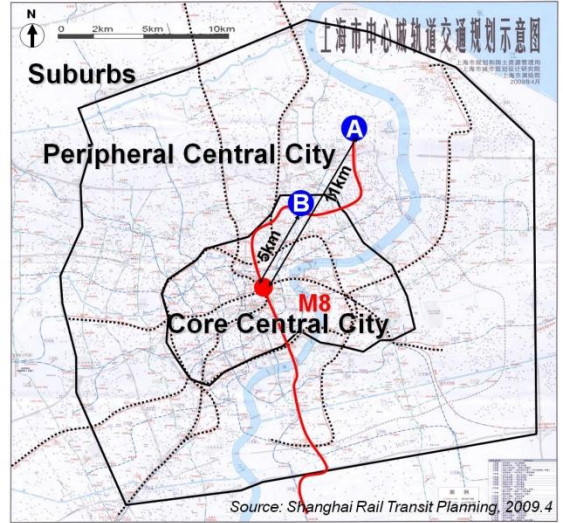
## Objective

1. What influence does MRT bring to the peripheral central city?
2. Whether the goals of MRT are realized?
3. How does the travel behavior change?

→ From view of travel behavior

## Survey

→ Shanghai city



Source: Shanghai Rail Transit Planning, 2009.4

	A area	B area	Total
Samples distributed	840	960	1800
Samples recovered	820	523	1343
Valid ratio	97.6%	49.8%	74.6%
Object	Residents over 10 years old		
Way to send:	Visit house by residential committee staffs		
Operation period:	Mar 3rd~ Mar 18th, 2009		
Content of questionnaire	Personal information		
	Travel behavior before & after M8 opens	Commuting	
		Going to main commercial districts	

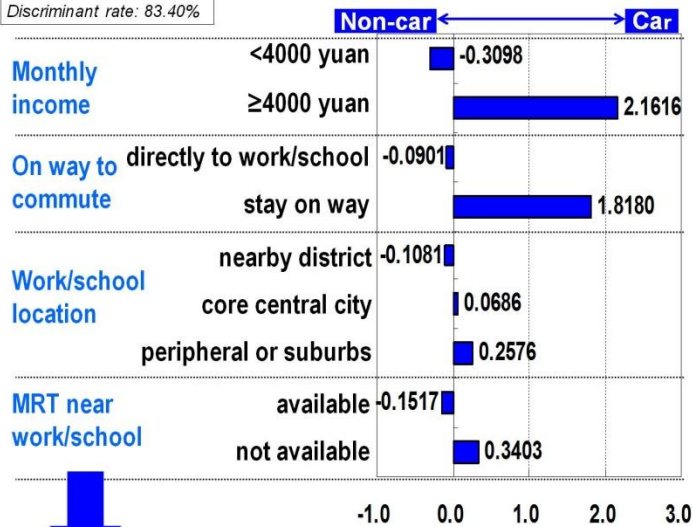
## Result



### Relationship between people's characteristics & Car Choice

By Methodology of Quantitative Analysis II

Correlation ratio: 0.1637  
Discriminant rate: 83.40%



1. high income persons prefer to use cars;
2. People who stay on way to commute use cars;
3. If MRT station is available near work or school, people also do not use cars possibly.

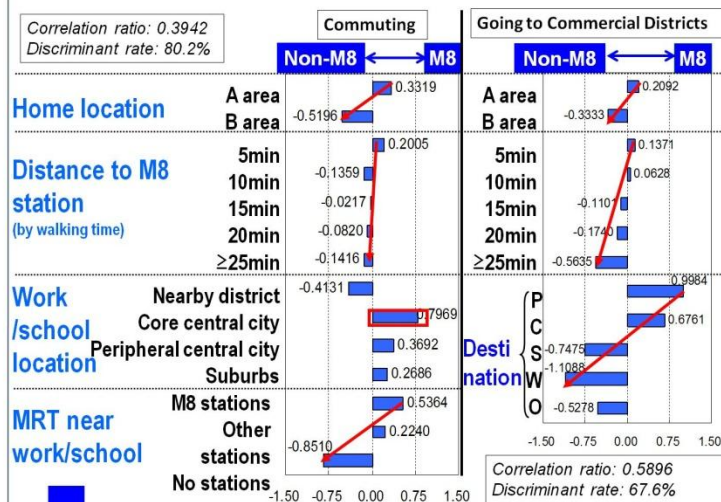
## Result



### Relationship between people's characteristics & MRT Choice

By Methodology of Quantitative Analysis II

Correlation ratio: 0.3942  
Discriminant rate: 80.2%



Correlation ratio: 0.5896  
Discriminant rate: 67.6%

People living in Peripheral central city for Commuting  
People go to Core central city with MRT station available

Relay on MRT