

DEVELOPING A MODEL OF MODE CHOICE IN RAMADI CITY

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ABSTRACT

The purpose of this study is analyze the factors affecting the mode choice to develop a model for travel choices by applying the technique of statistical analysis .

The study area is Ramadi city , it is center of Alanbar province . The study area has been divided in traffic zones. The total number of traffic zones was finally set at 15 traffic zones ,11 were internal traffic zones and 4 external zones.

For the purpose of the this study data were collected through random field survey for trip maker at their destination according to three categories of factors as describe below .

- Trip maker characteristics such as(age, sex, income ,car ownership , occupation and family size) .
- Mode characteristics such as (travel cost, travel time, level of service, waiting time , time in side the mode , time from origin to mode and time from mode to destination).
- Trip characteristics such as (trip purpose, origin of the trip and destination of trip)

The discriminant model was used in the study .The discriminant analysis were analyzed the trips according to trip purpose.

- Work trip (Home based work trip HBWT).
- Shopping trip (Home based shopping trip HBST).
- Education trip (Home based education trip HBET) .
- Recreation trip (Home based recreation trip HBRT).
- Other trips (Home based other trip).

The discriminate function illustrated the preference of choice of mode type and provided best separation between the mode type(private, public other(bicycle , motorcycle ,walking)). It classified the important factors affecting mode choice and their coefficients using Fisher Linear Discriminate.

In order to get benefit in drawing the polices of the transportation system of the to study area .

The result shows that cost and travel time are the important factors affecting mode choice . Cost is affected by 13.9 % and (age, sex, income) is affected by 26.1,and occupation is affected by 0.9 %, and destination 1.3 %, and waiting time 0.1 % .The result shows for all trips that taxi contribute for about 37.68%, private vehicles contribute for about 18.99% and governmental and public transportation contribute for about 10.6% .

The study recommends that in drawing polices of transportation in future . Similarly, encourage public and motor cycle mode transportation in Ramadi city depending on the models of this study.