



The Institute of Transportation Engineers
Traffic Engineering Council
presents TIPS on



Traffic Engineering

What is traffic engineering?

The Institute of Transportation Engineers defines traffic engineering as “that phase of engineering which deals with the planning, geometric design and traffic operations of roads, streets and highways...their networks, terminals, abutting lands and relationships with other modes of transportation...for the achievement of safe, efficient and convenient movement of persons and goods.”

When roads and streets were built many years ago, the biggest task facing the road builder was to keep them passable in all types of weather. The problem of moving large numbers of cars and parking them was not significant. As the number of cars increases, taxing the capacity of our streets and highways, the field of traffic engineering has become increasingly prominent.

Each year more people own and operate cars. Urban growth has increased the need for improving the movement of people and goods. Funding for new facilities has



decreased due to resistance to higher taxes as well as energy and environmental concerns. This has resulted in an increased emphasis on finding ways to better use the existing road system as well as finding ways to better move people and goods. Examples of alternative solutions to these challenges include promoting travel during off-peak hours and the use of public transportation.

The traffic engineer is concerned with groups and individuals and their needs, desires, actions, characteristics, capabilities and limitations as related to the roadway system. Decisions made by the traffic engineer affect drivers, passengers, and pedestrians.

