TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

Austin, Texas

What is Transportation Demand Management (TDM)?

- "Transportation Demand Management (TDM) refers to a set of strategies aimed at reducing the demand for roadway travel, particularly in single occupancy vehicles. These strategies address a wide range of externalities associated with driving, including congestion, poor air quality, less livable communities, reduced public health, dependence on oil, reduced environmental health, and climate change, and GHG emissions."

  - Reference Sourcebook for Reducing Greenhouse Gas Emissions from Transportation Sources, FHWA

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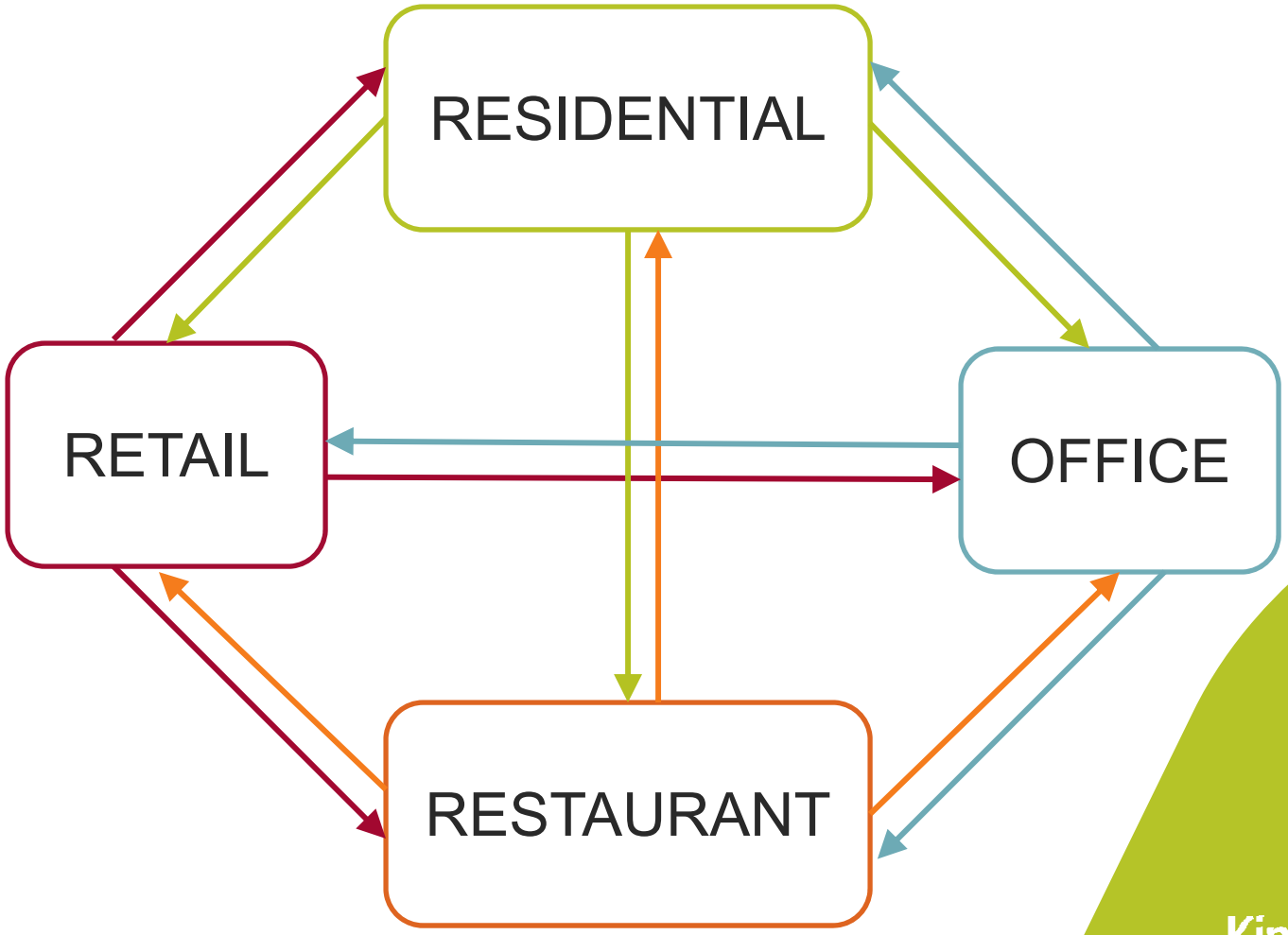
TDM Strategies

- Mixed Use Development
- Park Once and Walk
- Transit & Bicycle Improvements
- Telework & Flex Hours
- Parking Management and Pricing
- Ridesharing and HOV Lanes
- Road Pricing

Mixed Use Development

- Goal: Reduce transportation demand by eliminating trips or shortening trip lengths
- Mixing office, retail, and residential uses creates opportunities for internal capture trips, decreasing the demand on the external road network

Mixed Use Development
Park Once and Walk
Internal Capture



Transit and Bicycle Improvements

- Goal: Reduce single-occupancy vehicle (SOV) travel by increasing mode share
- Increasing transit ridership encourages travel that requires less physical space and energy
- Bicycle improvements

encourage drivers to shift

From driving to cycling

AUSTIN B cycle

CITY OF AUSTIN FOUNDED 1839

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Telework & Flex Hours

- Goal: Reduce peak hour transportation demand by removing or shifting trips to other times
- Telework removes trips from the road by allowing employees to work from home
- Flex hours encourages travel outside the peak hour, reducing trips during the most congested times

Consideration of Pass-by Trips

- While not a TDM strategy, considering land uses with high pass-by trips takes advantage of existing demand, minimizing the increase of new demand
- Examples:
  - Fast food (50% pass-by)
  - Coffee shop w/ drive-thru (70% pass-by)
  - Gas station w/ convenience store (56% pass-by)
  - Pharmacy/Drugstore (53% pass-by)

Pass-by trip information obtained from ITE *Trip Generation Handbook*, 3rd edition

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Parking Management and Pricing

- Goal: Reduce transportation demand by making more efficient use of parking facilities
- Requiring motorists to pay the direct cost of parking decreases parking demand, indirectly decreasing transportation demand

Ridesharing and HOV Lanes

- Goal: Reduce transportation demand by converting SOV trips to HOV trips
- Employer ridesharing programs and online services can assist in matching riders and drivers together

- HOV lanes encourage ridesharing by reducing the cost of express lane travel

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Road Pricing

- Goal: Reduce transportation demand by increasing the cost of vehicular travel
- Examples
  - Toll Roads
  - High-Occupancy Toll (HOT) Lanes
  - Distance based pricing
  - Congestion Pricing

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