

## Fleet Size Problems

- 1) How many vehicles are needed to maintain a 20 minute headway on a route 10 miles long with an average speed of 12 mph?
  
- 2) How long should the route be if only four vehicles are available for the route?
  
- 3) What would the average speed have to be to maintain a 10 mile route with 4 vehicles at 20 minute headway?
  
- 4) For No. 3, what level of demand peak can be accommodated with 50 passenger buses at a 1.0 load factor?
  
- 5) How many buses would be needed to accommodate a peak flow of 250 persons (50 passenger buses, 1.0 load factor, speed = 15 mph, 10 mile route)?
  
- 6) For No. 5, what is the resulting average headway?
  
- 7) For No. 5, what load factor would allow the cutting of one bus?