Dr. Babcock

1. a. What are the mass transit elasticities for price, line haul time, and access time?
   
   b. What are the implications of the elasticities in (a) for mass transit revenue and ridership?
   
   c. Given the elasticities in (a) describe the relative changes that must occur in prices, line haul time, and access time in order to produce a redistribution of commuters from autos to mass transit.

2. a. The journey to work trip can be divided into the collection, line haul, and distribution phases. Define each of these trip phases.
   
   b. Given the alternative modes of auto, bus, and rail, describe the relative time costs of each mode for each of the trip phases in (a).
   
   c. Comparing mass transit to automobiles, which mode has a time cost advantage for journey to work trips; which mode has a money cost advantage? How does the income of a commuter affect modal choice?

3. Transit ridership will increase when service improvements decrease the time costs of transit. Explain how the following transit modes can be designed to reduce time costs. Be sure to include any cost trade offs that may occur.
   
   a. the bus system
   
   b. the fixed rail system

4. a. What are the two ways in which HOVs improve bus service?
   
   b. Using a graphical analysis, describe the effect of HOVs on the private trip costs of commuters who continue to drive alone. What must occur for private trip cost to increase? What must occur for private trip cost to decrease?

5. The three principal types of urban transportation systems in use in American cities are auto system, bus system, and heavy rail (with feeder bus).
   
   a. What are the costs of these systems?
   
   b. How do the costs of these systems vary with passenger volume at peak hours?
   
   c. How do the costs of these systems compare to each other at various passenger volumes?

6. How do the capital costs, operating costs, and time costs of light rail systems compare to bus systems?

7. Explain the two economic arguments for mass transit subsidies.

8. Today, passenger fares cover only a fraction of the operating costs of mass transit. Explain the reasons for transit deficits.
9. Given the large deficits generated by public transit authorities, some economists have suggested that private firms could provide transit service more efficiently. Answer the following regarding deregulation of mass transit.

   a. Discuss three reasons why private firms could provide transit service at a lower cost than public transit.

   b. Explain two reasons why most cities restrict entry into the mass transit market.

   c. Discuss the results of the British Transport Act.

   c. Discuss three lessons from the British experience with deregulation of transit.

10. Explain how the poverty rate is affected by each of the following variables.
    a. Race
    b. Age
    c. Residential location
    d. Marital Status
    e. Education

11. In U.S. metropolitan areas, two-thirds of the black households live in the central city while two-thirds of the white households live in the suburbs. Discuss and explain five explanations for residential segregation.

12. To the extent that income sorting reduces educational opportunities for low income families it makes poor households worse off.
    a. How does the educational achievement of central city students compare to that of suburban students?
    b. What explains the low educational achievement of students in high-poverty, urban school districts?

13. According to economics research, how does residential segregation affect the following?
    a. commuting distances and the net wage of black workers
    b. employment rates of black and white youth (Ihlanfeldt and Sjoquist, 1990)
    c. commuting of central city blacks to jobs in the suburbs

14. The spatial mismatch hypothesis argues that residential segregation increases the poverty rate of black residents of the central city since they are geographically isolated from jobs in the suburbs.
    a. According to Katz and Allen (2001) what evidence is there of spatial mismatch in Atlanta?
    b. According to the Rafael (1998) study where is most of the employment growth occurring in metropolitan areas?
c. According to the Ihlanfeldt and Sjoquist (1991) study of 50 U.S. metropolitan areas, what is the relative importance of spatial mismatch in explaining differences in racial employment rates?

15. Some policy analysts argue that poverty in the central city would be reduced by policies that reduce the barriers that prevent central city residents from moving to the suburbs. Explain and discuss three policies that would lower these barriers.

16. Some policy analysts argue that poverty in the central city can be reduced by policies that promote economic development of the central city.

a. Explain two central city development policies. How effective have these policies been in reducing central city poverty?

b. Discuss two problems of the economic development approach in reducing central city poverty.

17. a. According to the Becker theory of wage discrimination, if labor markets are competitive, wage discrimination can’t persist in the long run. Explain Becker’s theory.

b. Can wage discrimination persist if labor markets are not competitive? Explain why or why not.

18. According to the theory of statistical discrimination, employment discrimination can exist if there is imperfect information on individual worker productivity. Explain this theory.

19. On average, white workers earn more than black workers.

a. What labor market factors could account for these earnings differences?

b. Based on recent empirical evidence, how much of the racial earnings gap is due to discrimination?

c. What are three general conclusions of the empirical studies concerning the role of discrimination in explaining the racial and gender earnings gaps?

20. In 1996 the welfare system was changed into one that requires work in exchange for time limited financial assistance.

a. Using graphical analysis, what effect will welfare reform have on wages and employment in the low-skill labor market?

b. What effect will welfare reform have on the wages of high school dropouts and female heads of household who were in the low-skill labor market prior to welfare reform?
c. What effect has welfare reform had on the welfare caseload? What effect has it had on poverty rates?