**Evaluating Curitiba’s BRT System: Points to consider…**

**Economic Sustainability**

+ Widely used as single fare for all journey lengths is affordable (even for slum dwellers)

+ At its peak, 85% of all residents were using the BRT (2.3 million passengers). These are high figures and provide evidence for its affordability

+ On average, residents spend only 10% of their income on transport – far lower than in other cities

+ Cost of BRT system was $200,000 per km, compared to $90 million for an underground system. Therefore the scheme was affordable for a city in an LIC (1970s) or MIC (today)

+ Ten privately owned bus companies operate the BRT. Managed by a public company but no subsidies are paid by the public company to the private bus companies so not a drain on government funds

+ High density buildings along the express bus routes provides the demand to support the BRT

+ BRT allowed the pedestrianisation of the CBD – giving retailers an economic boost

- Latest figures show a drop in residents using the BRT to 75%. This is likely to fall further as more working-class residents become middle-class and can afford their own cars / want the comfort and privacy of a car

- Weak Brazilian economy in recent years has reduced the maintenance of buses / delivery of new buses – creating service reductions and more overcrowding

**Environmental Sustainability**

+ Buses run on biofuel (better for the environment than fossil fuels). Newest buses have lower emissions and will eventually be zero emission electric buses. So far, buses have reduced CO2 emissions by 25%

+ Express routes with their high density buildings means lower density elsewhere, allowing large areas of land to be allocated as green space (parks) and lakes

- Lack of integration with other environmentally-friendly forms of travel – only 35km of cycle lanes (Amsterdam has 400km)

- Buses represent only 1% of vehicles on the city’s roads. 1.2 million vehicles v 12,000 buses means lots of traffic jams with resulting air and noise pollution

**Social Sustainability**

+ Bus stops within 400m of all homes so easy access to the bus network for all (young, old, disabled)

+ More than 350 tubular stations provide quick boarding times (less than 20 seconds) and offer shelter from rain / shade from sun

+ 20 transit centres allow passengers to change from connecting buses e.g. feeder buses to the express buses

+ Dedicated bus lanes and priority over other road users at junctions ensures quick journey times

+ Each bi-articulated bus has a high capacity - transporting up to 4,000 passengers per day

+ Green Exchange scheme allows slum dwellers to exchange waste for bus tokens

- Overcrowding at peak times remains a problem

**Future**

Plans to construct hundreds of kilometres of cycle lanes

Does Curitiba need another type of public transport system to increase choice and ensure the middle-class do not abandon public transport for the car?