## Sector-Level Descriptive and Performance Indicators

(1) Level of transport activity <sup>a</sup>

- Transport expenditure as percent of GDP;
- Value-added in transport as a percentage of total value-added;
- Employment in transport as a percentage of total employment;
- Total ton-kilometers performed per year by mode;
- Total passenger-km performed per year by mode;
- Capacity utilization by mode;
- Level of motorized traffic on primary and secondary roads (average annual vehicles per day);
- Level of motorization (registered vehicles per capita);
- Motorized mobility rate in rural areas (trips per person per year);
- Proportion of users of public transport (by mode) who are poor/low income.

(2) Market structure and regulatory regime

- Concentration ratio: proportion of total output/traffic carried by the single largest (or the five largest) operators/firms by mode;
- Ownership of public transport (government or private sector);
- Free entry/exit or not;
- Price control or not;
- Service obligations or not (routes, frequency, operating times).
- (3) Infrastructure condition
  - Proportion of national level roads in poor condition (including trends);
  - Proportion of secondary and feeder roads in poor condition (including trends).

(4) Accessibility

- Road density (km/km<sup>2</sup> and km/thousand population);
- Share of rural population, by region, without all-season motorized transport access;
- Average distance and travel time by dominant mode, from a community of households to nearest primary school and health clinic;
- Low-income neighborhood populations in urban areas where walking access to public transport exceeds 15 minutes.

(5) Tariffs for basic transport services

- Average and range of domestic freight rates for basic consumer and producer goods, such as grain and fertilizer (U.S. cents/ton-kilometer);
- Rate to ship 20-foot-equivalent (teu) container from main port to foreign port associated with major exports destination (US\$);
- Average bus/motorized vehicle fare for a five- trip (US\$);
- Average nonmotorized vehicle (rickshaw or similar) fare for a five- trip (US\$);
- Proportion of taxes in services cost structure by mode.

<sup>a</sup> Transport activity measures are descriptive indicators to place the transport sector in perspective with other sectors in the same country and as (crude) comparators across countries with similar geography and spatial distribution of population. In general, they are not prescriptive or performance measures. Whether more or less transport capacity and activity is "desirable" cannot be judged independent of country circumstances and the relative cost of transport.

Sector-Level Descriptive and Performance Indicators (Contd)
(6) Speed and reliability of services
<ul> <li>Average speed of buses/nonmotorized modes in urban areas (km per hour);</li> <li>Scheduled frequency of bus public transport (services per hour or day);</li> <li>Proportion of scheduled services not operated;</li> </ul>
<ul> <li>Average and range of time for exports to reach and leave port for shipment (days).</li> </ul>
(7) Safety <sup>b</sup>
<ul> <li>Transport-related fatalities and injuries per capita (NMT and MT), by mode, urban and rural (number per annum);</li> </ul>
<ul> <li>Road traffic fatalities and injuries per (registered) motor vehicle—pedestrians (adults/children) and vehicle occupants—poor/nonpoor (number per annum);</li> <li>Incidence of HIV/AIDS among transport sector workers (especially truck drivers);</li> <li>Health education campaigns.</li> </ul>
(8) Financial sustainability
<ul> <li>Operating cost recovery ratio by mode;</li> <li>Total subsidy per passenger (passenger-km) by mode (U.S. cents and percentage of full fare);</li> </ul>
<ul> <li>Total operating subsidy by government to all public transport as percentage of GDP, by mode;</li> </ul>
Ratio of actual to warranted expenditure on road maintenance.
(9) Environmental Impact
<ul> <li>Proportion of leaded gasoline in total gasoline consumption;</li> <li>Proportion of two-stroke vehicles in motorized vehicle fleet within urban areas;</li> <li>Unit emission levels in urban areas (for example, carbon monoxide)</li> </ul>
<sup>b</sup> Health risks to the poor associated with transport activity warrant specific diagnostics. Pedestrian and other NMT accidents can be expected to be higher among the poor as these modes are mainly used by the poor, and they are more vulnerable to harm from motorized vehicles. The spread of infectious diseases by transport-related activities (operators, construction workers, travelers), and especially the incidence of HIV/AIDS among transport sector operators such as truck drivers, is a major health risk, particularly in sub-Saharan Africa.

<sup>&</sup>lt;sup>7</sup> This aggregate measure is commonly recognized as a composite or sum of the individual "attractiveness" of all other relevant locations, by virtue of their "facilities", weighted inversely by the total travel "impedence" ( cost, time, effort, etc.) associated with reaching each one of them. For additional discussion on this measure see Technical Note 1.