

Background Paper: Shanghai Metropolitan Transport White Paper

What: The Shanghai Metropolitan Transport White Paper is the first comprehensive transport plan for the city that outlines current and future transportation needs and sets specific objectives and actions for city planners and managers. The white paper was issued in April 2002, and is the first of its kind for any city in China.

Purpose: The white paper was created to respond to the transportation needs Shanghai will face as its population expands in the next 20 years and as private automobile ownership grows along with it.

Shanghai expects its population to increase to over 16 million people by 2020, with over half being in the workforce. The number of cars will increase to 2.5 million, while the number of motor trips per day will more than double to 7 million.

The white paper outlines a comprehensive transportation plan for the city, with both short and long-term objectives that will accommodate the anticipated growth of the city between now and 2020. The overall goal is to “provide accessible, safe, comfortable and clean transport services.”

Scope: The white paper is broad in scope and sets objectives for these key areas of transportation in Shanghai:

- Roads: Construction of major new highways; dedicated roads for certain uses (freight); road use pricing for peak areas and times of day.
- Water: New river crossings; allocation of infrastructure for industrial and recreational use.
- Transit hubs: Designation of hubs to integrate short and long haul rail transit; provision for hubs to accommodate auto and non-motorized passengers.

- Rail: Increased construction of light rail and metro systems.
- Buses: Development of priority corridors; integration with rail systems, elimination of duplicate routes.
- Parking: Adequate spaces for vehicle growth; pricing for designated areas of city; incentives for using alternate transport.
- Integration: Use of single “smart card” to accommodate all transport uses in Shanghai, including parking, tolls and mass transit fares.

Highlights: These are some of the major transportation objectives set forth in the Transport White Paper. Overall, the plan calls for the number of trips per day in the city attributable to public transit to increase from 21% in 2000 to 26% in 2005. By 2020, that will increase to 35% city-wide and 50% in the Central Business District. Other highlights include:

- Increasing the arterial road capacity from 2.7 million vehicle km/hour to 4.1 million by 2005; that will increase to 6.5 million by 2020.
- Completing rail transit network of 540km of track by 2020. This includes both Urban Metro lines and Regional Express lines linking new towns to the city.
- By 2005, doubling the number rail system rider trips per day to 3 million, and increasing that to 12 million by 2020.
- Conversion of non-motor traffic lanes to bus-only lanes in selected areas.
- Increasing the average speed of buses in the Central Business District by 25% to 15km/hr by 2005.
- Increasing daily bus ridership to 9 million by 2005. By 2020, buses will serve most short and medium distance travel in the city.
- Replacing 8,000 buses and retrofitting existing buses for clean energy usage.
- Moving long-haul hubs out of Center City and connecting them with city transit system.
- Providing adequate Park and Ride facilities at hubs outside city for both cars and bicycles.
- Increasing off-street parking capacity from 8,000 spaces to 60,000 spaces by 2005, and up to 300,000 by 2020.
- Reducing NOx emissions from motor vehicles by 40% from 2000 levels; by 2020 Center City air quality to meet National Standard Grade B.