



## Integrated land use and transport planning

### Key points

- *It is imperative to build cities that cater to the mobility needs of people – not cars.*
- *How people travel and how goods are transported are heavily influenced by what kind of urban structure is in place. Integrating decisions on land use with those for transport is of vital importance to ensure the move towards more sustainable cities.*
- *New neighbourhoods should be built around a public transport corridor to minimize reliance on cars.*

### Integrated land use and transport planning explained

This measure generally concerns the development of a master plan and an associated institutional structure that allows for issues of urban land use to be strategically linked to how the transport network is designed. The overall goal is to ensure that development of land (both new and regenerated) is conducted with the consideration of its transport-generating impacts, and minimise any potential problems in advance. More specifically, it aims to ensure that public transport, cycling and walking facilities are existent or newly provided at potential origins and destinations, such as shopping facilities, schools, hospitals, residential areas and commercial centres.

### How it works

Emphasis can be placed on transit-oriented development principles as follows:

**Increases density along with mass transit corridors:** This may involve increasing density standards and possible land uses along major routes, restricting development from taking place at a specified distance from major transit arteries, and creating incentives for development at recognized nodes, whether they be major intersections or mass-transit hubs (such as aligning centres of mixed use with mass transit corridors).

**Coordinates the routes of various public transports to ensure wide coverage.**

**Improves pedestrian access:** This includes convenient pedestrian connections to transit and between buildings, as well as outward-oriented buildings which serve as destinations for pedestrians; creating walkable streets; incorporating parking garages and cycling facilities into public transit stations

### Strengths in integrating land use with transport planning

- Creates opportunities for economic development and job creation through business opportunities in the mass transit network, as well as access to local employees.
- Reduces the private vehicle trips and traffic congestion, resulting in a more pleasant environment.
- Reduces energy consumption and carbon emissions via reduced private vehicle trips.
- Increases density and convenient access to mass transit allows for public transport to become profitable.

### Challenges to integrating land use with transport planning

- **Lack of institutional integration:** One government department is in charge of land use planning while

another has responsibility for transport and no structure for collaborating.

- **Lack of land rights, regulation and planning laws:** Private developers are free to develop land in ways that are not suited to sustainable forms of transport.
- **Lack of a long-term strategy:** Ad hoc planning and development takes place without concern for the long-term viability of the city and its transport system.

### **Weakness**

The concept may be difficult to apply into the cities already developed with dependence on private cars (strong resistances from car users, difficulty in redirecting already existing paths serving private cars).

### **Implementing strategies**

**Establish a coordinating body at the local level** that links plans on transport with those on land use and formulates integrated master plans.

**Strengthen land rights, regulation and planning laws** to ensure that private developments are done in ways to support sustainable forms of transport.

**Provide financial incentives**, such as value capture with developers.

### **Examples**

**Curitiba, Brazil:** Curitiba, Brazil has successfully implemented a widely used, yet low-cost, transportation system that connects districts throughout the city

**Sweden:** Shopping malls cannot be building without proving accessible by public transport.

**Japan:** Suburban towns and cities are often built around railway corridors, allowing the public to access the city centre by rail.

### **Further reading**

*How Land Use Affects Transport* by Todd Litman and Rowan Steele (Victoria, Australia, Victoria Transport Policy Institute, 2011). Available from [www.vtpi.org/landtravel.pdf](http://www.vtpi.org/landtravel.pdf)