

Q1//

- (a) Delimitation of the study area
- (b) Zoning
- (c) Selection of relevant supply elements (basic network)
- (d) Graph construction
- (e) Identification of performance and cost functions
- (f) Identification of impact functions

Q2//

	$e_1$	$e_2$	$e_3$	$e_4$
1	1	1	0	0
2	1	0	1	1
3	0	1	1	0
4	0	0	0	1
5	0	0	0	0

Q3//

**(A) Minimum network.** Represents the simplest configuration possible to link a set of locations, but has also the longest average path length.

**(B or C) Intermediate network.** Represents a network topology seeking to find a compromise between the shortcomings of minimalism and the excess of redundancies. Mesh-like networks are also intermediate forms of connectivity. It is usually the maximum level of connectivity that a physical transport network can take.

**(D) Complete network.** A highly redundant network with a complex topology that has an average path length close to the geographic barrier; the lowest possible average path length. These are usually abstract networks such as social networks and are very rare because of the complexity that this high level of connectivity would entail.

Q4//

- Autonomous developments result from demographic changes (e.g. migration), increased car ownership, income changes, and international economic changes (e.g. oil price).

Characteristically, these developments rarely may be influenced by transportation planning.

- Typical for economic policy (e.g. gasoline taxes), social policy (e.g. working hours, labor force participation), and spatial policy (e.g. reduction of agricultural land use) is that these policies may have an impact on transportation but are not developed in the transportation field for transportation-related purposes.
- Transportation policy refers to plans designed by transportation professionals to change the transportation system directly (road or rail, public or private, car or bicycle, etc.).
- Traffic measures refer to changes in the operations of the traffic system such as traffic lights, parking, public transport services, etc. Decisions at this level mostly are of a technical kind.