

21. Improvement of 20 January Intersection

(1) Objectives

The objectives of improving this intersection are as follows.

- a) To relieve the traffic congestion at the intersection and to secure a smooth traffic flow on Tbilisi Ave., one of the major radial arterial roads.
- b) To reinforce the function as a transport node and enhance the convenience of transit between city bus and subway, between city buses, and between city bus and inter-city bus.
- c) To contribute to traffic safety and improve the environment of the intersection through installation of nighttime lighting facilities and green belts.



Figure 21.1 Location Map

(2) Improvement Plan

1) Improvement of Intersection

Altering lane formation and traffic restriction was proposed to enable smooth traffic flow in future as a rotary intersection with signals. Existing too large rotary scale will be reduced again. The rest space will be used for green areas and taxi pools.

Since Tbilisi Ave. is currently a 4-lane road, it is proposed to increase it to 6 lanes to cope with future traffic volume. Signal control is also proposed.

2) Terminal Improvement

The facilities arrangement improvement plan for this district is proposed to enhance the convenience of passengers who transfer between the inter-city and international bus terminal, and the city bus terminal (including terminal for buses for Sumgayit) and the subway, and to build a pedestrians' pass within the market.

It is proposed to connect the tramlines to Memar Adzhemi station for the tram passengers to enjoy the convenience available from the station and to shift some minibus routes terminating at 20 January intersection to Memar Adzhemi station.

Based on the rearranged bus routes, the bus stops will be relocated outside the intersection. In this case, the intersection will be rebuilt as compact as possible, taking the bus routes into account.

A bus terminal for the buses for Sumgayit city will be installed separately from the city bus terminal because the traffic characteristics (such as number of passengers, frequency and stop time) of the buses for Sumgayit city are different from those of city buses. Total project cost was estimated at some 2 mil. USD.

(3) Project Evaluation

1) Economic Evaluation

This project is sufficiently feasible due to the relatively low cost and high efficiency of traffic.

EIRR	NPV (million USD)	B/C
20%	0.95	2.27

2) Environmental Impact Assessment

As a result of examination, it is considered that introducing the signal control system does not have a significant impact on the environment with the adoption of countermeasures. It is expected that the project will contribute to improve traffic conditions around the 20 January Square, and utility of public transportation and pedestrian environment will be also improved.

(4) Conclusion

It has become clear from the survey-based calculation that the present congestion results from bottleneck formation by disorderly stopping of mini-buses, not from traffic volume.

In improving this intersection, it is proposed that the adjacent intersections in the north-south direction should be improved in order to reduce the intersection load. Even if these construction costs are added, the cost-effectiveness shows a high value.

This intersection is a very important traffic node in Baku City. It is expected that this project will accelerate the utilization of public transport modes and help this area grow as a sub-center of the northwestern part of Baku City.

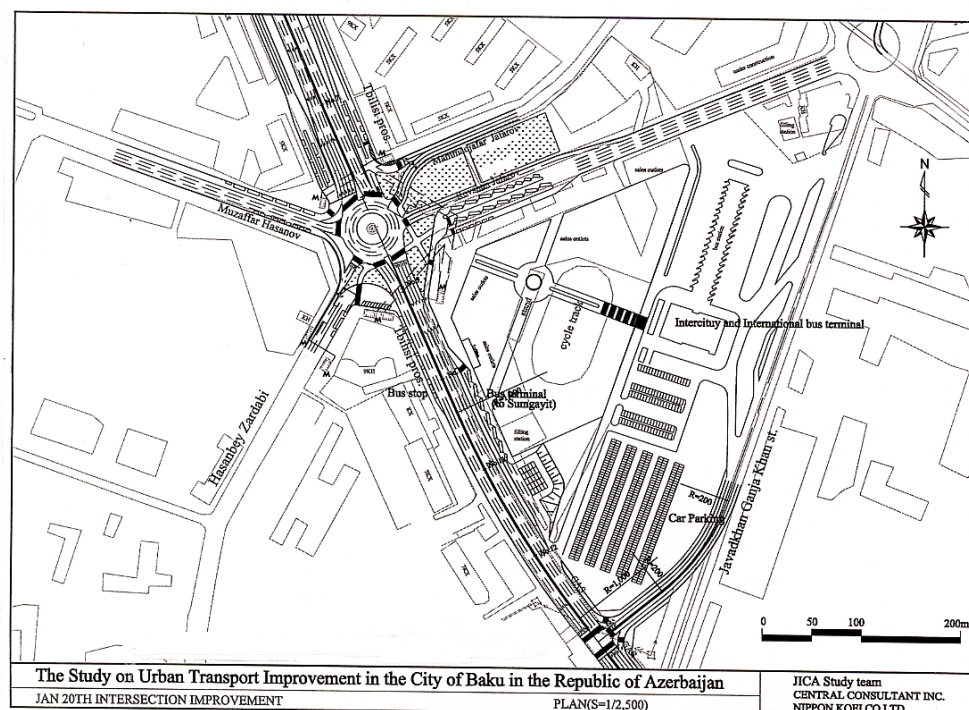


Figure 21.2 Improvement Plan of 20 January Intersection