

Theme 3

Reducing Congestion



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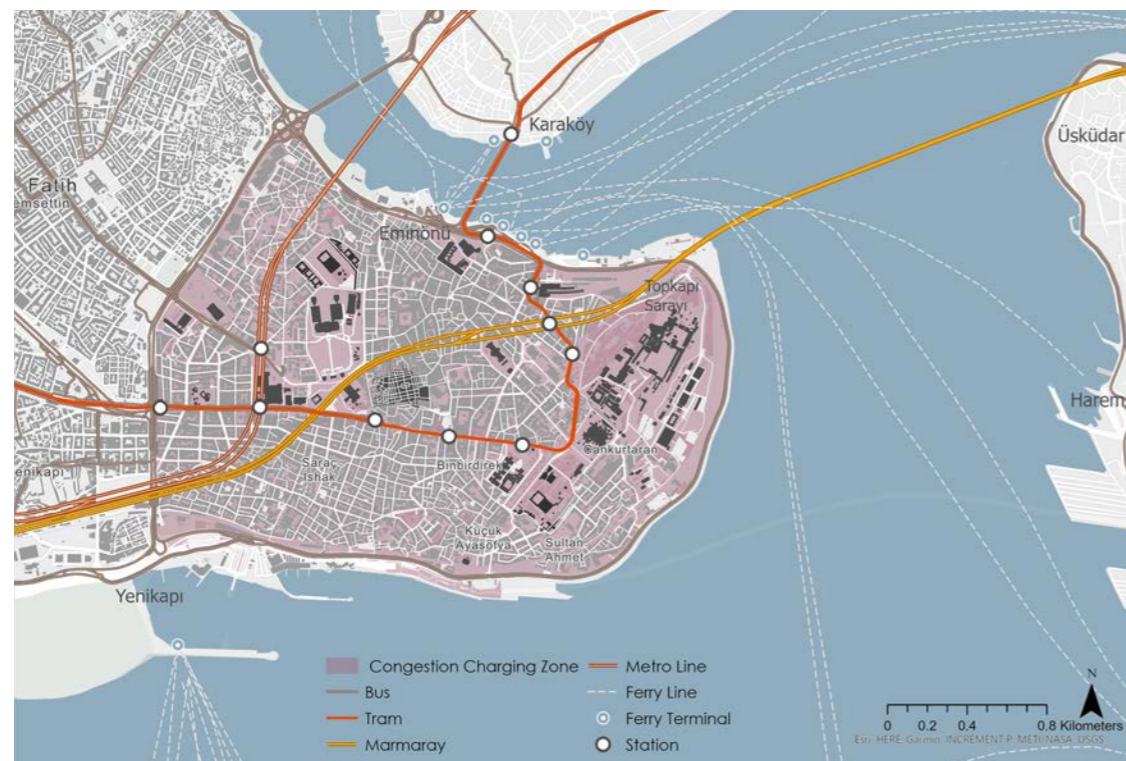
The projects under this theme aim to solve traffic congestion problems in Istanbul by reducing the use of private cars, which is the main source of these problems. The projects improve alternatives to private car use (pull) by attracting trips to sustainable modes, and deter travellers from private car use (push) through demand management measures. Theme 3 projects offer solutions in the context of demand and mobility management, parking regulations and freight transport management.

Parking regulations and demand management strategies related to parking are among the measures that can be taken against traffic congestion problems in cities. Considering that all vehicles need parking spaces at their destinations, practices such as restricting parking supply (or not providing parking spaces) or setting parking fees high enough to deter users and so on, have a high probability of success. Moreover, in metropolitan cities like Istanbul, it is impossible to cope with the parking demand from an ever-increasing number of motor vehicles. As part of the Istanbul SUMP, the parking issue has been addressed from different aspects with four core projects that are interconnected in terms of content and scope, and are the cornerstones of newly developed parking policies.

One of the topics covered under Theme 3 is mobility management. This includes interventions to change the choices and behaviours of citizens regarding transportation, and to ensure that sustainable transportation modes are used more frequently. These practices usually include both soft measures, such as providing information or organising services, and stronger measures, such as imposing taxes or introducing regulations. A combination of complementary soft and hard measures leads to efficient management practices. Of the three mobility management projects developed under Theme 3, the **Implementation of Institutional Mobility Management** and the **Neighbourhood Mobility Service Centres** are soft measures, while **Congestion Charging** is a hard measure.

1 Congestion Charging

Congestion Charging requires private car users to pay for entering certain areas. Its main purpose is to prevent congestion problems from heavy private car traffic, especially in central areas, to create more liveable spaces and to increase citizens' quality of life. Besides being a deterrent, Congestion Charging generates additional income, which can be used to improve air quality and the public transport system. Putting active transport arrangements in place will increase the success of this intervention. The Istanbul SUMP proposes a pilot Congestion Charging project in an area of approximately 6 km² in the Historic Peninsula. It is possible to run this in parallel with the LEZ (as proposed in Theme 1 and as happens in London). This pilot implementation will be a test bed for different pricing applications that may be launched in other parts of Istanbul in the coming years.



Congestion Charging Zone for the Historic Peninsula

Problem Description

Air pollution arising from transportation is high and this decreases the air quality of citizens and threatens their health. Congestion and unreliable journey times for cars and buses.

Relation with Other Projects

- Low Emission Zones
- Istanbul Network Management Control Centre (INMCC)

Preparatory Tasks

- Using following in policy development phase; feasibility study, functional design, technical design, institutional and legal design and stakeholder engagement.

Follow-Up Tasks

- Developing the implementation plan.
- Monitor congestion and travel times, travel patterns, public transport usage, and business, economy and accidents.
- Launch an air quality monitoring programme.

Beneficiaries

Population of Istanbul, public transport network, visitors, and city centre residents

Owner/Responsible

IMM

Third Parties Involved

Public and public transport operators

Project Process

Preparation

Duration: Short
Scope: Feasibility studies

Pilot

Duration: Medium
Scope: Pilot area implementation

Implementation

Duration: Long
Scope: Roll-out of the project citywide

Estimated Budget

High Cost – Above 100 million TL

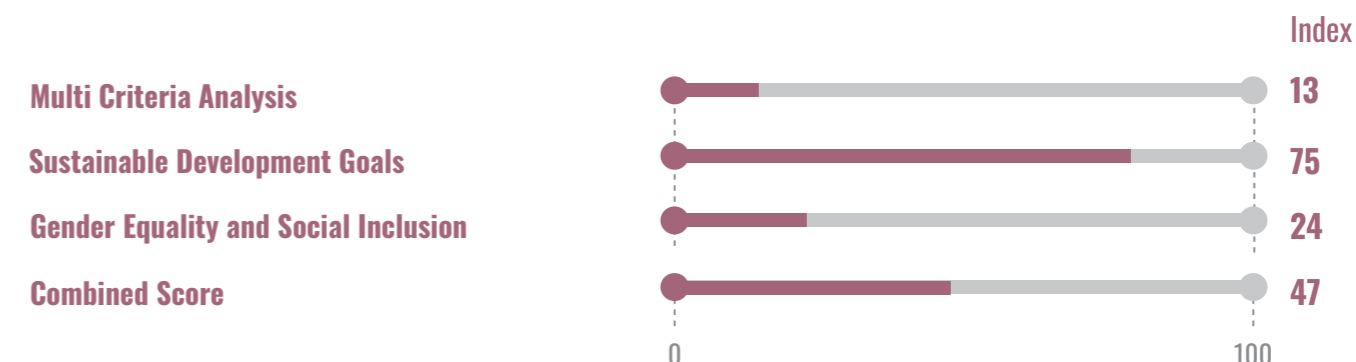
Financing Source

IMM

Contribution to SUMP Objectives



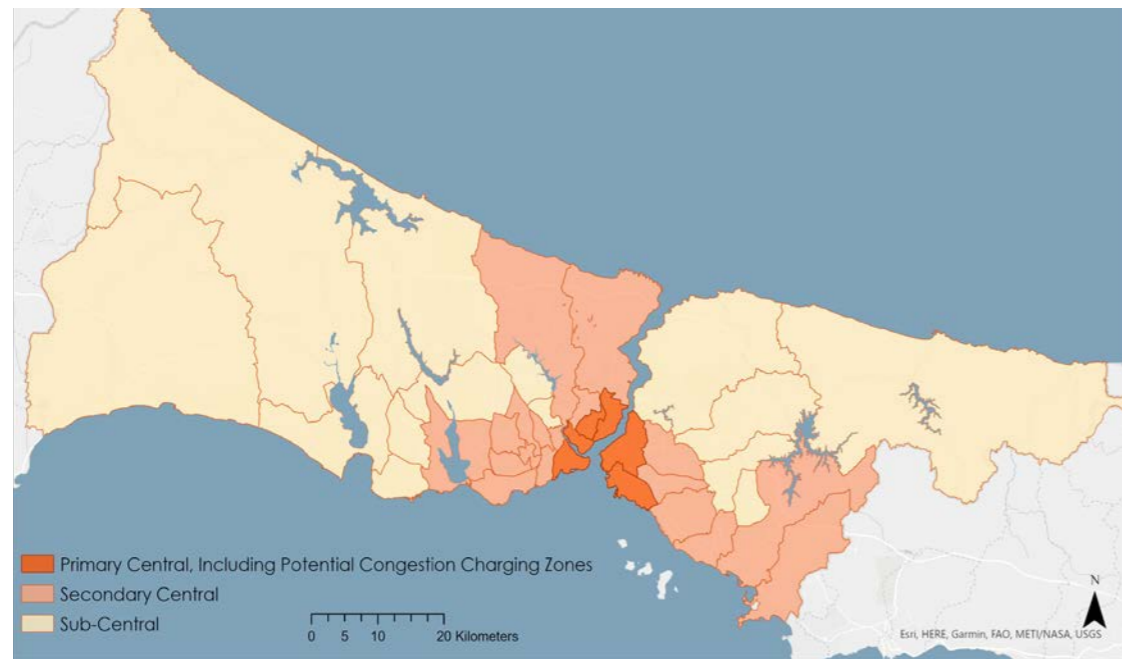
Index Values of Appraisals



Rank: 19/26

2 Extension of Parking Regulation

The main project to focus on parking areas and prices is the Extension of Parking Regulations. The project classifies areas of Istanbul as primary central, secondary central and non-central, depending on parking demand, land use and so on, and parking supply and fees will be different in different areas. This will result in extended coverage of paid parking in the city, with varying fees based on the spatial classification (e.g. higher fees in primary central areas, lower fees in non-central areas). The main benefits of the project include: (i) ensuring more efficient use of existing parking spaces; (ii) clearing valuable public spaces of private cars; and (iii) creating an additional income source for the municipality by increasing revenues from parking management.



Location Map

A map with three different areas has been defined as follows: Primary, spatial, secondary, non- central areas.

Problem Description

Parking congestion, extensive park search traffic, parking management loss making, insufficient benefits from potential regulating power of parking management to decrease motorised traffic volume, pedestrian footways blocked by parked cars, extensive public space occupied by parked cars.

Relation with Other Projects

- Pedestrian Routes
- Traffic Calming
- Residents' Parking Permit System
- Introduction of an Automated Payment System for Parking
- Reorganisation of Parking Regulation Enforcement

Preparatory Tasks

- The revised parking policy needs to be drafted and decided.
- An improved legal framework, which makes sure that non-payment of the parking fee can actually be enforced and fines can effectively be collected.

Follow-Up Tasks

- Monitor occupancy of parking places; to high occupancies may need changes in parking regulation, such as further increase of the parking fees.
- Monitor effectiveness of parking enforcement operation, non-payment.

Beneficiaries

IMM/ISPARK, City population, residents in affected areas

Owner/Responsible

IMM, ISPARK

Third Parties Involved

ISPARK, Districts, residents in affected areas, private operators parking facilities

Project Process

Preparation

Duration: Short
Scope: Legal framework

Pilot

Duration: Short
Scope: Pilot area implementation

Implementation

Duration: Medium
Scope: Roll-out of the project citywide

Estimated Budget

High Cost – Above 100 million TL

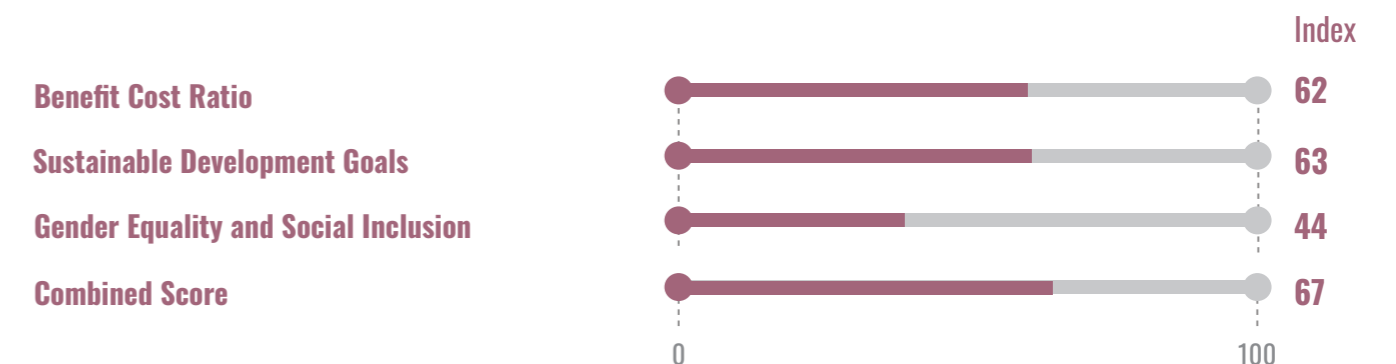
Financing Source

IMM

Contribution to SUMP Objectives



Index Values of Appraisals



Rank: 9/26

3 Residents' Parking Permit System

The Residents' Parking Permit System offers discounts to residents where paid parking is introduced, for use of on-street parking spaces in their area. Residents can obtain neighbourhood parking permits, valid for a given period, at a lower price than the price for short-term parking. This project is complementary to parking policies, and ensures that neighbourhood residents do not have problems finding a parking spot.



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Problem Description

Need to extend the areas with parking regulation and the need to protect the residential function of the parts of the city where these regulations will be introduced.

Relation with Other Projects

- Extension of Parking Regulation

Preparatory Tasks

- A proper legal framework needs to be established.
- The revised parking policy needs to be drafted and decided.
- ISPARK needs to develop an organisation that manages the permit system and has a squad of parking wardens available that enforce the regulation.

Follow-Up Tasks

- Monitor the availability of parking space for residents.
- Monitor the number of permits sold in relation to available parking spaces per zone.

Beneficiaries	Owner/Responsible	Third Parties Involved
Residents in affected areas, IMM/ISPARK	IMM, ISPARK	ISPARK

Project Process

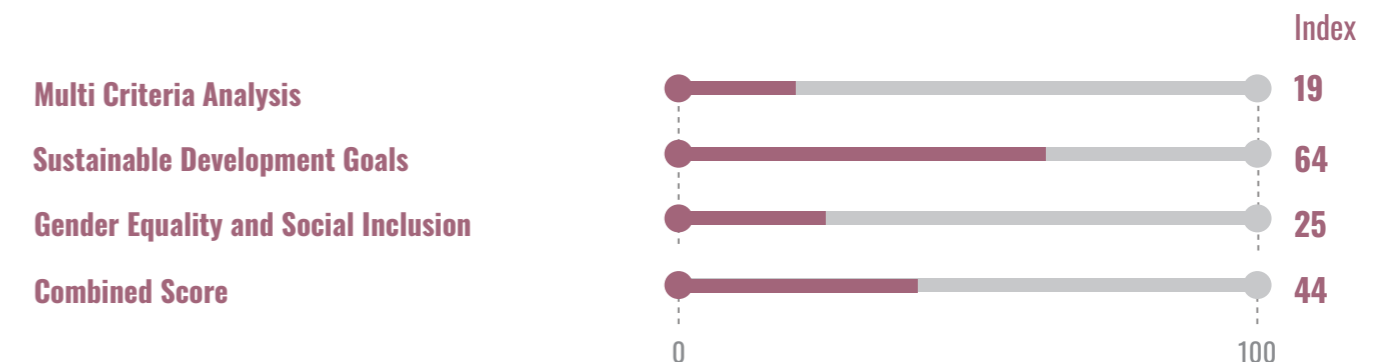
Preparation	Pilot	Implementation
Duration: Medium Scope: Legal framework	Duration: Medium Scope: Pilot area implementation	Duration: Long Scope: Roll-out of the project citywide

Estimated Budget	Financing Source
Integrated in "Extension of Parking Regulation"	IMM

Contribution to SUMP Objectives



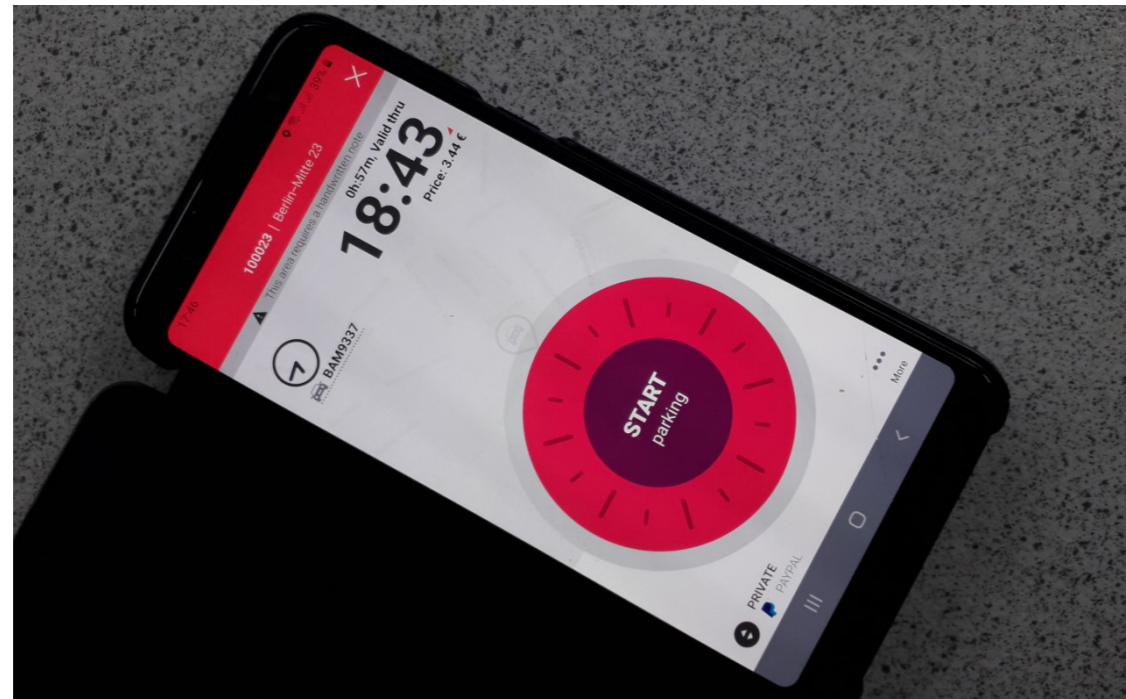
Index Values of Appraisals



Rank: 22/26

4 Introduction of an Automated Payment System for Parking

Introduction of an Automated Payment System for Parking also extends parking regulations by implementing a technological system to collect parking fees in the city. Currently, at roadside parking lots fees are paid to a site official; at outdoor and indoor parking lots, payment is made on exit. The proposed project will ensure the development and improvement of all aspects of the existing payment system. Increasing the efficiency of collecting parking fees, increases IMM revenues from parking management.



©Arup

Problem Description

Need to implement an automated payment system, which is decisive for the effectiveness of the parking management operation in Istanbul.

Relation with Other Projects

- Extension of Parking Regulation
- Residents' Parking Permit System

Preparatory Tasks

- An improved legal framework.
- The revised parking policy needs to be drafted and decided.

Follow-Up Tasks

- To manage and monitor the contract with the service provider.

Beneficiaries	Owner/Responsible	Third Parties Involved
Citizens/Users, IMM/ISPARK	IMM, ISPARK	ISPARK, provider of services

Project Process

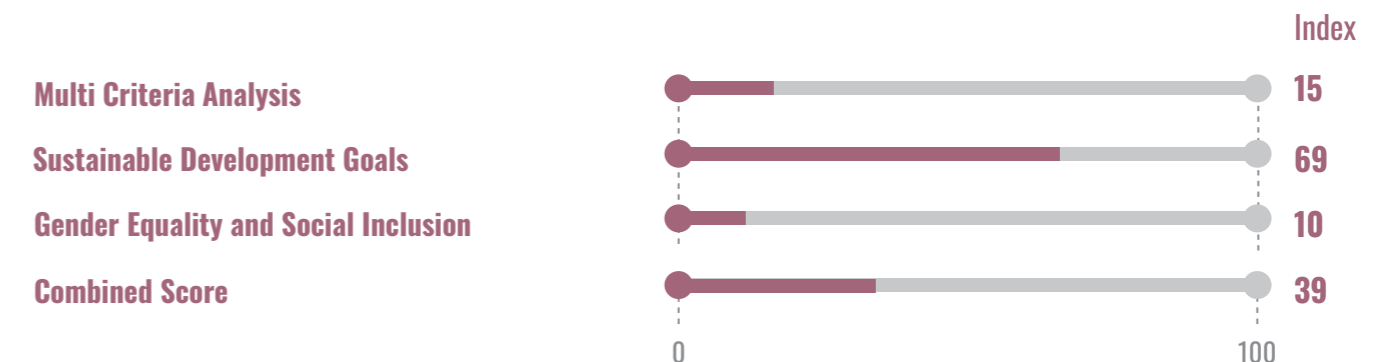
Preparation	Pilot	Implementation
Duration: Short and Medium Scope: Legal framework	Duration: Medium Scope: Pilot area implementation	Duration: Long Scope: Roll-out of the project citywide

Estimated Budget	Financing Source
Initial costs beared by the selected provider	N/A

Contribution to SUMP Objectives



Index Values of Appraisals



Rank: 25/26

5 Reorganisation of Parking Regulation Enforcement

The fourth parking project is the Reorganisation of Parking Regulation Enforcement. This focuses on control and enforcement practices, another fundamental issue related to parking lots. Currently, ISPARK officials collect parking fees, while municipal traffic officers or traffic police enforce parking regulations (parking fines, etc.). Fines are imposed on the vehicle licence plate, not on the driver. This leads to a confusion about lines of authority and makes it difficult to follow up on fines or to inspect and enforce efficiently and reliably. This project aims to ensure that IMM acquires all inspection and enforcement powers regarding parking lots by making the necessary legal arrangements.



©ISPARK

Problem Description

Need to implement an effective and efficient parking regulation enforcement, which is decisive for the effectiveness of the parking policy and for collecting the potential substantial revenues from parking.

Relation with Other Projects

- Extension of Parking Regulation
- Residents' Parking Permit System
- Introduction of an Automated Payment System for Parking

Preparatory Tasks

- An improved legal framework.
- The revised parking policy needs to be drafted and decided.

Follow-Up Tasks

Monitor the following:

- Share of non-payment for on-street parked cars.
- Share of fines that could actually be collected, share of fines that lead to appeals and court cases.
- Costs and benefits of the parking enforcement operation.

Beneficiaries

Citizens (in affected areas),
IMM/ISPARK

Owner/Responsible

IMM, ISPARK

Third Parties Involved

ISPARK

Project Process

Preparation

Duration: Short and Medium
Scope: Legal framework

Pilot

Duration: Medium
Scope: Pilot area implementation

Implementation

Duration: Long
Scope: Roll-out of the project citywide

Estimated Budget

Integrated in "Extension of Parking Regulation"

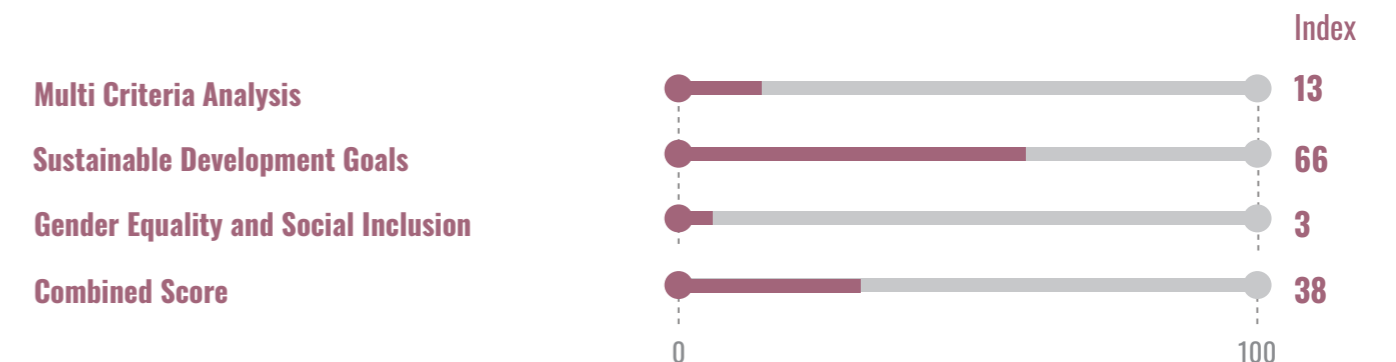
Financing Source

IMM

Contribution to SUMP Objectives



Index Values of Appraisals



Rank: 26/26

6 Implementation of Institutional Mobility Management

The Implementation of Institutional Mobility Management covers organised, and systematic actions that IMM can take to encourage citizens to use sustainable transport. These go from individual level actions (such as providing information about the benefits of cycling, support to make bikes available to employees and campaigns to promote walking), to corporate level policies (such as working from home and flexible working hours). The latter require cooperation between IMM and the private sector, while the former need citizens to change their habits. This project proposes promotional actions and incentives to increase the share of sustainable modes and to reduce traffic congestion.



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Problem Description

Congested networks, especially during peak hours, car usage with all related negative impact.

Preparatory Tasks

- Building a network among institutions and companies above a certain size; seek cooperation with employer organisations, Chamber of Commerce etc. to get in contact with these employers.
- Implementing mobility management in the own IMM organisation and in affiliated organisations to demonstrate good practice and success.

Follow-Up Tasks

- Monitoring number of organisations participating.
- Setting targets in each of these organisations in terms of results from the implemented programs and monitoring achievements of each of the targets within each of the participating organisations.

Beneficiaries

IMM/ISPARK, private businesses and other organisations and their employees.

Owner/Responsible

IMM

Third Parties Involved

Business community, Educational institutions etc.

Project Process

Preparation

Duration: Short
Scope: Selection/training of staff

Pilot

Duration: -
Scope: -

Implementation

Duration: Medium
Scope: Roll-out of the project

Estimated Budget

Low Cost – 0-10 million TL

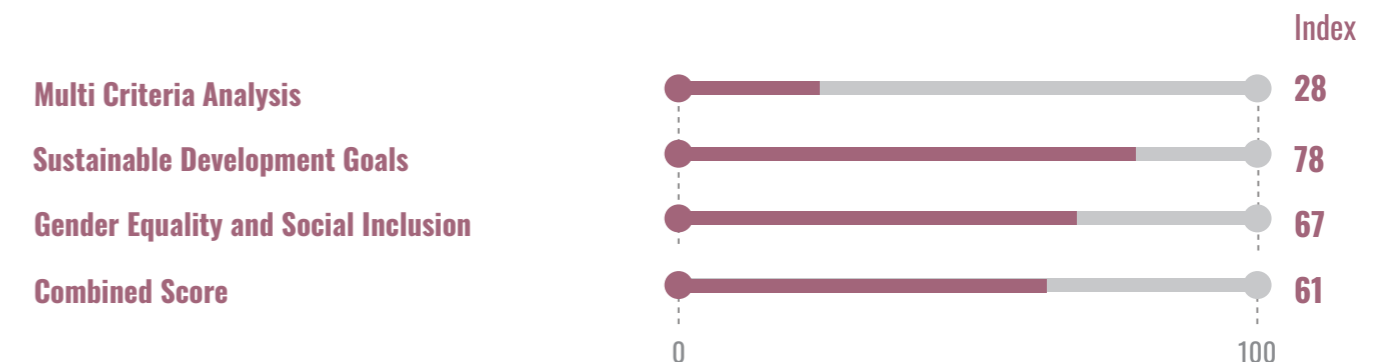
Financing Source

IMM, private sector

Contribution to SUMP Objectives



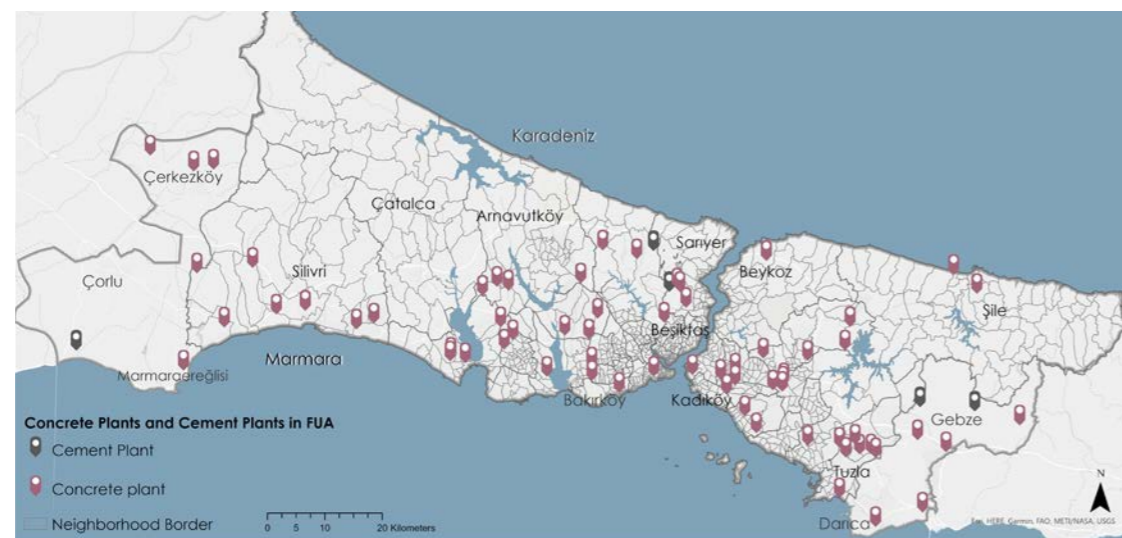
Index Values of Appraisals



Rank: 11/26

7 Construction Materials Concentration Centres (CCCs)

The only project for the urban freight transport and logistics sector covered under Theme 3 are the Construction Materials Concentration Centres (CCCs). A CCC is a distribution centre for storing and consolidating construction materials according to requirements and then directing them to construction sites. The main policy objective is to provide environment-friendly and efficient solutions for the construction supply chain and material transportation logistics. Considering the number and volume of housing and transportation infrastructure constructions in Istanbul, it is possible to say that this project will play an important role in improving the city's air quality and increasing the quality of life of the citizens. This CCC project will develop business plans that address supply-related problems by developing sustainable solutions. Although the project has a limited implementation framework, it is important as it focuses on a sector that causes significant negative externalities in Istanbul.



Concrete Plants and Cement Plants in FUA

Problem Description

The construction industry is one of the biggest consumers and producers of freight transport in the urban areas of Turkey. This industry is normally very fragmented in a huge number of suppliers and distributors that deliver their materials and goods in different construction sites that they serve around a specific area. Some of the direct consequences of the fragmentation of the construction industry are the raise of the transport and production costs and the increase of the problems caused by the urban freight transport (i.e. congestion, accidents, GHG emissions, noise and air pollution, etc.).

Relation with Other Projects

- Istanbul Network Management Control Centre (INMCC)

Preparatory Tasks

- Reviewing of IMM's institutional capacity in line with the Istanbul Logistics Master Plan (ILMP).
- Selecting the most suitable business models taking into account its commercial, financial and organisational feasibility.
- Setting up the data base for monitoring the schemes in the CCC areas.

Follow-Up Tasks

- Delivery and pick up, activity monitoring and air quality monitoring database development.

Beneficiaries

Public authorities, transport companies, construction companies and general public

Owner/Responsible

IMM

Third Parties Involved

Public authorities, Transport companies, Construction companies, Research organisations

Project Process

Preparation

Duration: Medium
Scope: Legal framework, feasibility studies

Pilot

Duration: Medium
Scope: Pilot area implementation

Implementation

Duration: Long
Scope: Roll-out of the project

Estimated Budget

Medium Cost – 10-100 million TL

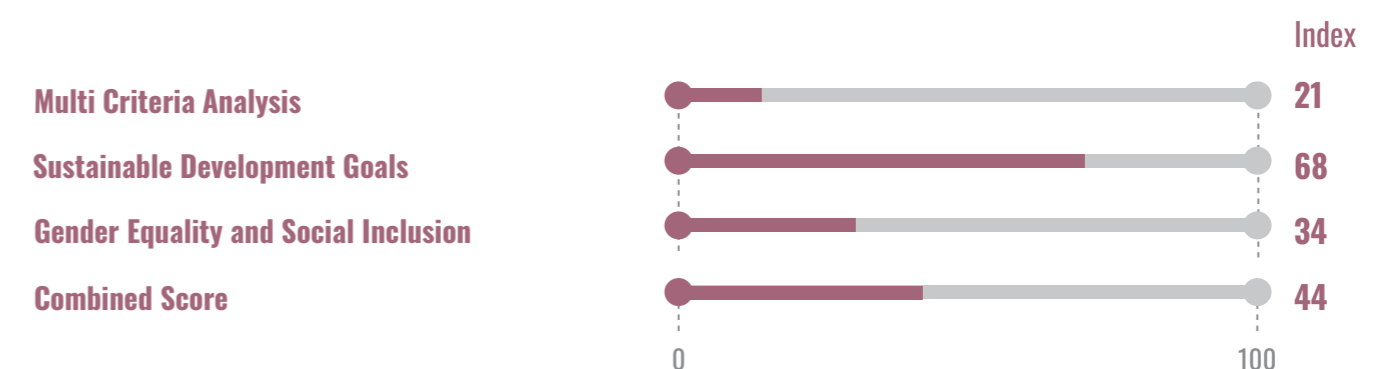
Financing Source

IMM, private sector

Contribution to SUMP Objectives



Index Values of Appraisals



Rank: 21/26

8 Neighbourhood Mobility Service Centres

Neighbourhood Mobility Service Centres bring together different transport modes and mobility-related services in one location. A typical centre contains services such as storage/parking areas, shared mobility alternatives, information, consultancy, bicycle repair, logistics services and more. Their main purpose is to increase accessibility to services at the neighbourhood level and to encourage citizens to use sustainable mobility options. IMM is challenged to develop Neighbourhood Mobility Service Centres mainly through cooperating with the private sector and by providing land incentives or subsidies.



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Problem Description

Changing mobility needs of the population which is poorly facilitated; negative impact of (online shop) deliveries in residential areas.

Relation with Other Projects

- Implementation of Institutional Mobility Management
- E-Bikes and E-Scooters
- Cycle Feeder Routes

Preparatory Tasks

- Select neighbourhoods with a population that is prone to adapting innovative concepts as the one under consideration (young, starting families, highly educated etc.).
- Bring together potential businesses (including from the logistical sector) that may be interested in participation.
- Find space in real estate to establish a Service Centre.
- Start a feasibility study including a market study to define the potential business.
- Develop a business case for the Service Centre in cooperation with the business partners; consider the need for subsidising.

Follow-Up Tasks

Monitor the following:

- Number of business partners interested in participation.
- Evaluation of business results.
- Goods put through, bicycles rented, shared cars rented etc. as applicable.

Beneficiaries

Residents in residential areas, selected businesses.

Owner/Responsible

IMM

Third Parties Involved

Business community, logistics stakeholders.

Project Process

Preparation

Duration: Short
Scope: Selection/training of staff

Pilot

Duration: Short
Scope: Pilot area implementation

Implementation

Duration: Medium and Long
Scope: Roll-out of the project

Estimated Budget

Medium Cost 10-100 million TL

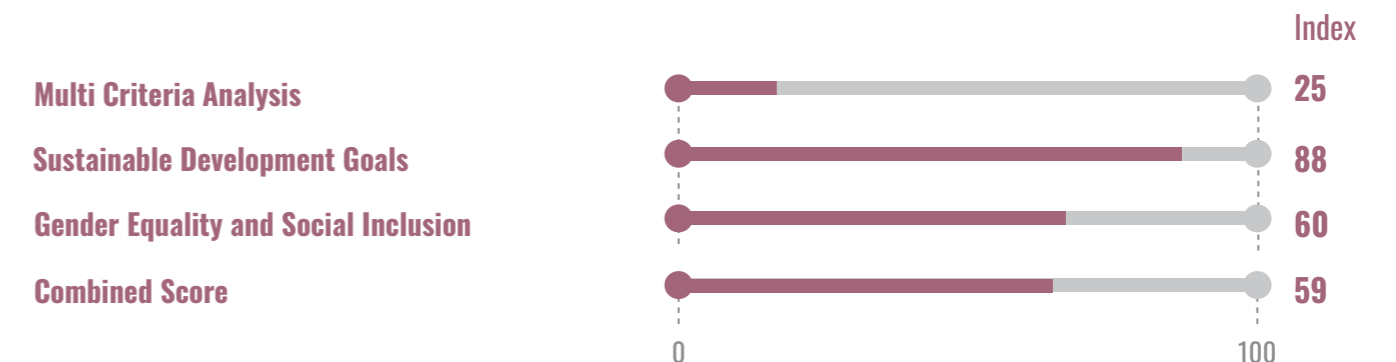
Financing Source

IMM, private sector

Contribution to SUMP Objectives



Index Values of Appraisals



Rank: 14/26