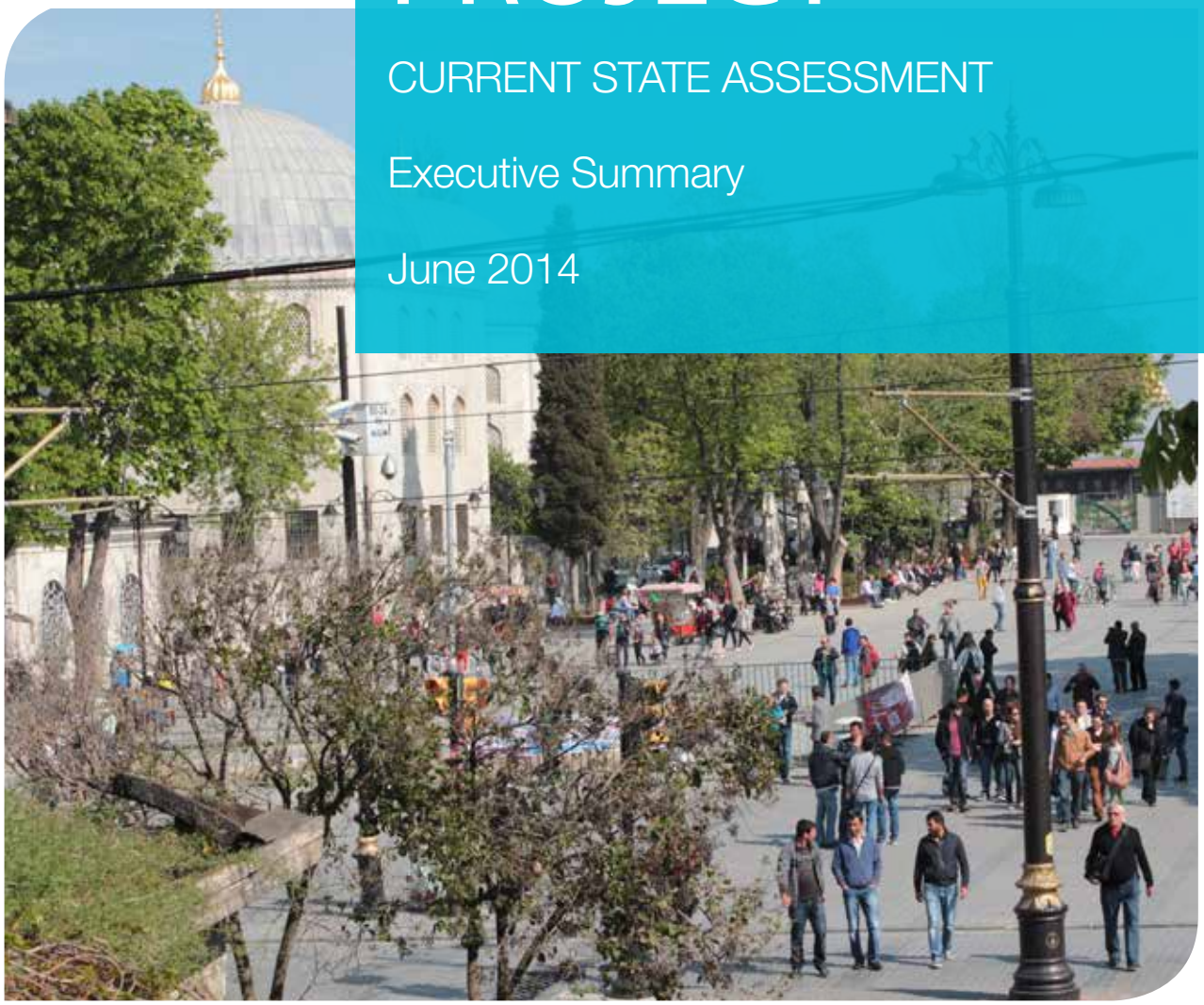
ISTANBUL HISTORIC PENINSULA PEDESTRIANIZATION PROJECT

CURRENT STATE ASSESSMENT

Executive Summary

June 2014



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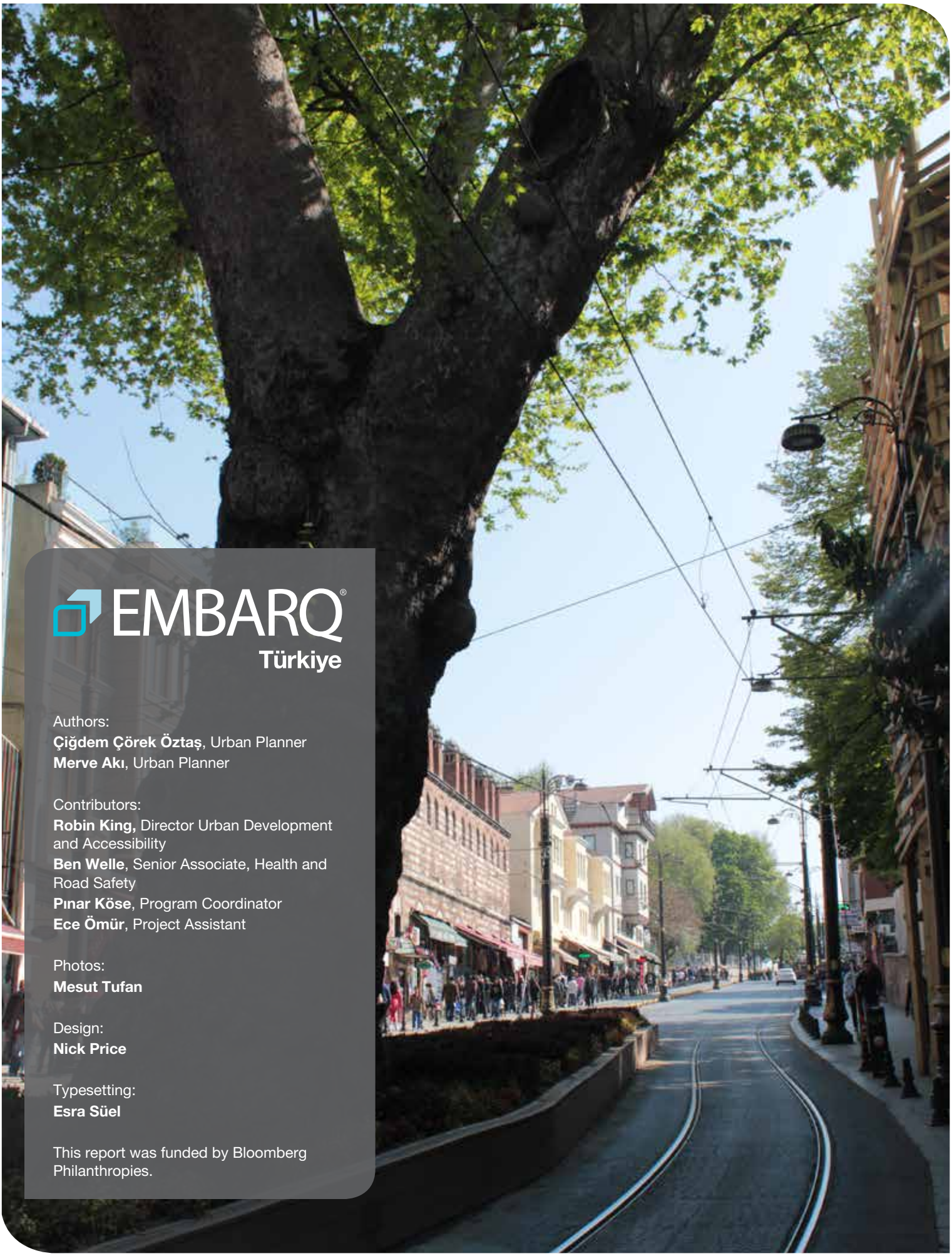

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FOREWORD

Safe, attractive, and accessible spaces for community interaction are a vital component of sustainable, livable cities. Too often, city leaders sacrifice public space and walkable neighborhoods in the name of urban growth and expansion. Pedestrianization - the process of closing streets to vehicle traffic, either permanently or during certain hours - not only improves safety and accessibility for pedestrians but also brings larger social, environmental, and economic benefits for cities. Pedestrianization improves public health by providing opportunities for physical activity through active transport, curbs local air pollution, and improves traffic safety. It decreases the number of cars on the road, helping to reduce greenhouse gas (GHG) emissions and mitigate global climate change. Finally, pedestrianization supports local businesses and fosters economic growth through tourism and cultural exchange, building thriving and prosperous urban communities. These changes combine to create cities that are livable and sustainable, improving quality of life for urban residents.

The founding purpose of EMBARQ Turkey – Sustainable Transportation Association is catalyze and help implement environmentally, socially, and financially sustainable urban transport and urban development solutions to improve quality of life in cities. In 2010, EMBARQ Turkey, in cooperation with Gehl Architects and the Fatih Municipality, proposed a pedestrianization project to expand sustainable mobility and create a more accessible Historic Peninsula for Istanbul. The project aimed to reshape the Historic Peninsula as a space for people, not cars, detailing specific strategies for sustainable transport and urban design and planning.

Since 2011, the Fatih Municipality has pedestrianized 295 streets, benefiting the roughly 2.5 million people that walk the streets of the Historic Peninsula each day. This report details the project's impact on students, residents, and local businesses in the Historic Peninsula, and assesses the how the redefined space has affected their lives. The report aims to assess the impact of the project both in terms of environmental sustainability as well as social impact in order to improve future efforts at pedestrianization and other people-centered design strategies.

I would like to sincerely thank my colleagues who have contributed to this report; the local businesses of the Historic Peninsula, who have helped us to a great extent; Fatih Municipality; and finally, the students and the people of Istanbul.

Arzu Tekir
Director of EMBARQ Turkey

Photo: Kadir Çıtak


KALE
KİLİTLERİ
ANAHTARCI

EXECUTIVE SUMMARY

Istanbul Historic Peninsula, which served as the capital of Roman, Byzantine and Ottoman Empires, has been the center of many civilizations over the past 8500 years. Surrounded by the Golden Horn, the Bosphorus, and the Sea of Marmara, and bordered by Byzantine city walls on its western side, the Historic Peninsula, or "Suriçi" as it was called during the Ottoman period, marks the location of the first settlements in Istanbul.

Urban planning efforts for the Historic Peninsula were initiated in Turkey's early Republican period. The Prost Plan (1936-1951) marked the beginning of efforts to conserve and sustain the Historic Peninsula, with objectives including the conservation of Istanbul's historical silhouette, the restoration of historical buildings, and the construction of new modern buildings.

The rapid population growth of the 1950s strained the historic nature of the urban fabric. During 1960-1967, Professor Luigi Piccinato developed the Greater Istanbul Master Plan, which recommended certain strategies to prevent the transformation of Istanbul into an ever-growing concrete landscape, and to reorganize local administration with a metropolitan view of the city. Nevertheless, the Historic Peninsula's continuing development as an urban center resulted in the transformation of its functional character. Largely driven by the growth of production industries, this period of urbanization triggered immigration and the rise of illegal settlements, rendering a holistic plan for the old city nearly impossible. Residential buildings were transformed into boarding houses, storage facilities, small-scale workshops and ateliers. Although the Historic Peninsula had always been home to intense commercial practice, its spread throughout the entire Peninsula eventually resulted in the loss of the area's residential qualities, leading to a major decrease in resident population and an increase in the number of workplaces.

Historically, the Peninsula was characterized both as the densest residential area and the central commercial area of Istanbul. Today, the Historic Peninsula is characterized by zones of dense functional uses, including service industries, education, housing and tourism. Inhabitants are concentrated in certain areas, such as Eminönü and Alt Laleli, while educational and commercial activities are dispersed over the entire Peninsula. Tourist activities are foremost present in Sultanahmet and its immediate surroundings.

The Historic Peninsula is also a transportation hub, serviced by many different types of public transportation systems. In addition to an overwhelming student population, the area's established identity as a "commercial center" attracts many urban users. Eminönü harbors the intersection of tram and ferry lines, while Yenikapı houses the intersection of Marmaray and metro lines, connecting both of these districts to important transfer hubs.

Despite the presence of effective and various modes of mass transportation, the Historic Peninsula still suffers from the pressures of an ever-growing and highly motorized city. Surrounding coastal streets such as Kennedy, Reşadiye and Ragıp Gümüşpala carry especially high volumes of vehicle traffic. The demand for parking in the Historic Peninsula, even at its pedestrianized center, is accordingly high. It must also be mentioned that transportation opportunities within the Peninsula are insufficient, with only a single high-capacity railway system crossing the district.

In 2005, the Istanbul Metropolitan Municipality (İBB) decided to re-evaluate the Historic Peninsula's multi-layered structure. Taking into account the Peninsula's role as a historical, cultural, and transportation center, İBB launched a series of pedestrianization projects with the aim of increasing the quality of life in the area. A set of accompanying regulations by

the municipality's Transportation Coordination Center (Ulaşım Koordinasyon Merkezi (UKOME)) intended to reduce the negative effects of vehicle traffic on tourist and commercial activities were introduced throughout 2005-2009, and pedestrianization projects for Eminönü, Beyazıt, Ayasofya Square, and Gülhane Park were completed. Sultanahmet Square and its surrounding streets were pedestrianized in 2010, and the administrative plan for tourist buses and heavy vehicle traffic was enacted within the same year. 2010 also marked the completion of the "Istanbul Public Spaces and Public Life" project, in cooperation with EMBARQ Türkiye, Gehl Architects, and the Istanbul Metropolitan Municipality. This project conducted detailed analyses of the area and helped further develop pedestrianization proposals and strategies, resulting in a 2010 report of the same name.

Since 2010, 295 streets in Eminönü, Tahtakale, Beyazıt, Laleli, Gedikpaşa and Hocapaşa were pedestrianized. The municipality also carried out supporting infrastructure projects for the pedestrianized areas including repaving the newly pedestrianized streets with granite pavestones, signalization, and reorganization of waste management services.

This report was prepared to determine the state of satisfaction with the completed pedestrianization project among the main users of the Historic Peninsula: Istanbul residents, students at Istanbul University's Beyazıt Campus, and employees/ business owners in the area. Using field interviews, observations, and existing data, it also aims to assess present conditions of the area after pedestrianization.

Table 1 Pedestrianization Progress Between 2005 – 2013

2005 - 2009		Pedestrianization project for Eminönü square and roads nearby Beyazıt square pedestrianization and İETT perons recovery project Ayasofya square pedestrianization project Pedestrianization project for Gülhane Park
2010		Site management project for tourist buses; parking area rearrangement and Shuttle route project Pedestrianization project for Sultanahmet square and roads nearby "İstanbul Public Spaces and Public Life" by Gehl Architects and EMBARQ Türkiye
2011 - 2012		90 streets are pedestrianizated in Eminönü, Tahtakale ve Beyazıt 23 streets are pedestrianizated in Üst Laleli 115 streets are pedestrianizated in Alt Laleli 15 streets are pedestrianizated in Hocapaşa 7 streets are pedestrianizated in Çemberlitaş
2013		Perception analysis completed and "Pedestrianizing İstanbul's Historic Peninsula: Perspectives from Local Business" report is prepared. Road safety inspection completed and "Istanbul's Historic Peninsula Design Concepts for Safe, Accessible Streets" report is prepared. "Assessment of Pedestrianization Project in Historic Peninsula" report is completed

Resolution and implementation regarding the pedestrianization *Resolution and implementation covering bus rearrangements*

In order to measure the level of satisfaction, three surveys were conducted:

• a 10 question “resident survey” collecting information on demographics, opinions regarding transportation and evaluations of changes in the physical and environmental quality.

• a “student survey” targeting the students of Istanbul University’s Beyazıt Campus, consisting of 10 questions on demographics, views on transportation and changes in physical and environmental qualities.

• a third “commercial survey” targeting local businesses. This survey encompassed the qualities of both the resident and student surveys while gathering additional sectoral information in a total of 33 questions. The questions in the commercial survey were categorized under seven main headings: social and economic structure; transportation; road safety; benefits; environmental quality; and general satisfaction.

Within this report, demographic characteristics of respondents, and the basic attributes of either their places of employment or personal businesses are presented in the “Social and Economic Structure” section. Aspects such as choice of travel mode, walking distances and parking are analyzed in the “Accessibility” section. Data on traffic accidents that occurred within the municipal borders of Fatih District and views of respondents concerning the accident rates after pedestrianization are presented in the section “Road Safety.” The perceived benefits of pedestrianization in the Historic Peninsula and its impact on the physical environment are discussed in the “Benefits” section; the section titled “Environmental Quality” includes views on topics such as air quality, street sanitation and motorized vehicle noise. Finally, the status of general satisfaction regarding the project is studied in the “Satisfaction” section through a comparative analysis of views before and after the completion of the pedestrianization project.

Map 1 Streets Where Surveys Were Conducted

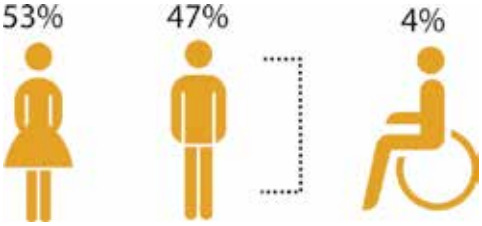
MAIN FINDINGS

SOCIAL STRUCTURE

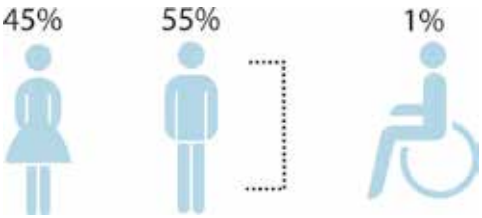
The analysis of the survey conducted in the Historic Peninsula shows that, albeit with some exceptions, men are far more represented than women (76% and 24% of survey respondents, respectively). A total of 1290 people responded to the survey.

- Out of the total 459 respondents of the resident survey, 53% were women and 47% were men. 4% of respondents declared disabilities hindering their mobility.
- Of 91 student respondents, 45% were women and 55% were men. The respondents with a disability constituted 1% of survey takers.
- Of 740 responding employees/business owners, only 6% were women and 94% were men. In contrast to the gathered resident and student data, the majority of people associated with local businesses are men. The survey also revealed 1% of the commercial survey respondents to have disabilities that prevent their mobility.

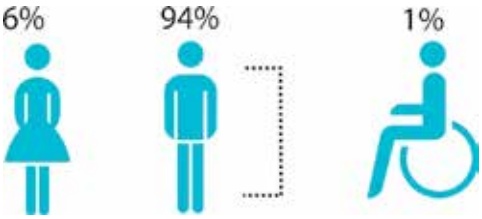
Residents



Students



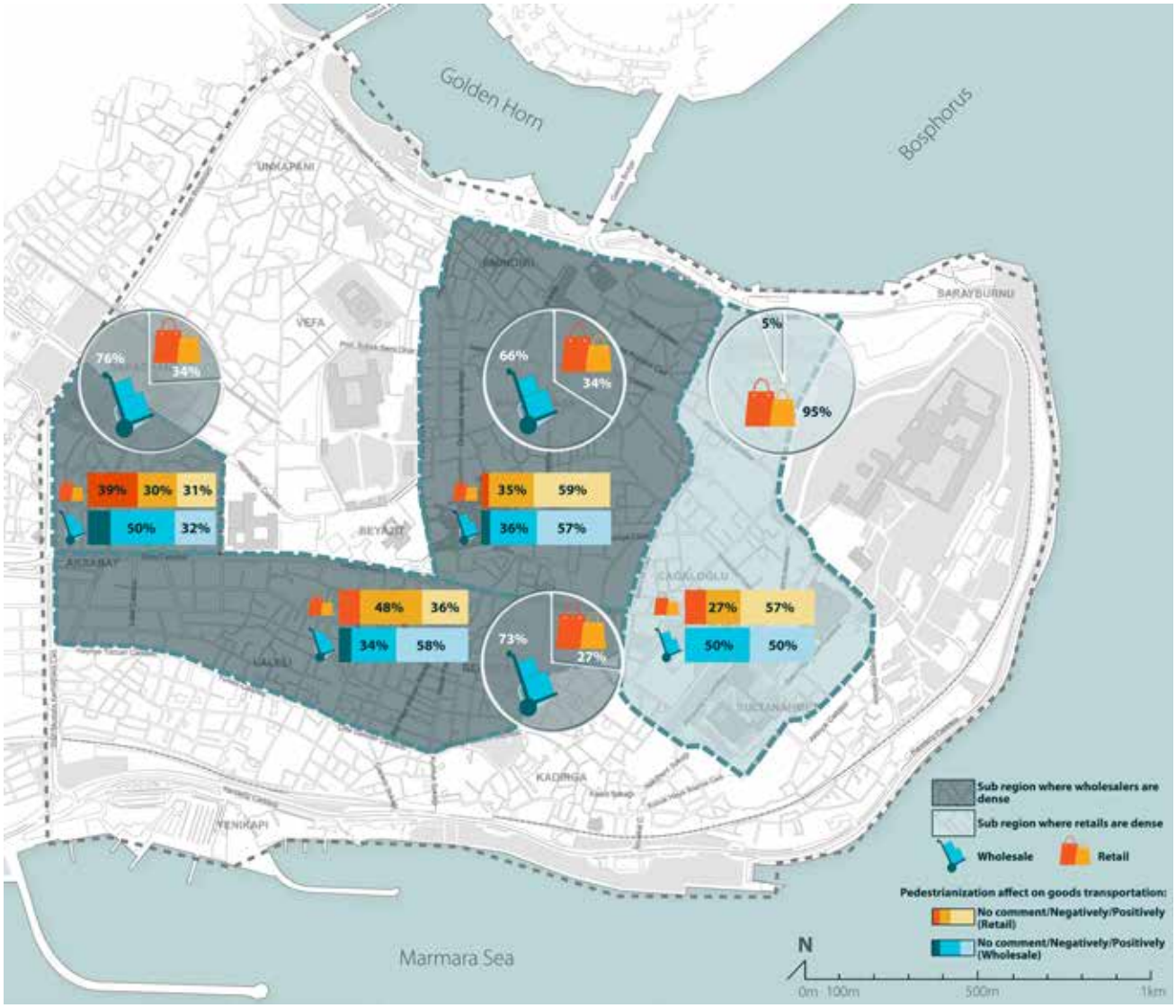
Employees / Business owners



ECONOMIC STRUCTURE

The data collected with the commercial survey shows that 47% of the respondents in the Historic Peninsula are retailers and 53% are wholesalers. Among commercial survey respondents, 50% indicated that the pedestrianization benefitted their delivery and collection activities, while 37% expressed negative views and dissatisfaction with this aspect of the project. In the retail sector, 51% of respondents agreed that pedestrianization had a positive impact on their business. 35% of retailers disagreed. This distribution was similar among wholesalers, 52% of respondents agreed that pedestrianization had a positive impact on their business. 38% of retailers disagreed. The increase in street dealers after the pedestrianization was a significant cause of concern among commercial survey respondents. 53% of employees/business owners confirmed such an increase and 77% expressed their displeasure regarding the issue.

Map 2 Distribution of Retailers and Wholesalers by Sub-Region



ACCESSIBILITY

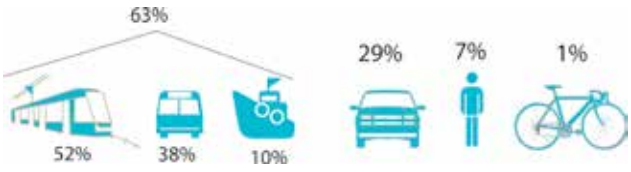
As the accessibility to different types of transportation is an important indicator for the projects' success and current rate of satisfaction, survey respondents were asked about their choice of travel mode to get to the Historic Peninsula.

- The transportation preferences of residents were railway systems (41%), ferry (30%), bus and personal vehicle (both 13%), on foot (2%) and by bicycle (1%).
- The survey revealed that the relative majority of students (45%) prefer to take the bus to reach the Historic Peninsula, while 25% used railway systems, 11% used the ferry and 15% arrived on foot. Only 4% of the students use personal vehicles.
- The commercial survey shows that 63% of employees/business owners use mass transportation (52% railway, 38% bus, and 10% ferry). 29% use personal vehicles to get to work, 7% arrive on foot and 1% ride bicycles. 79% of drivers use parking lots and 21% park on road-sides. In addition, 78% of respondents mentioned that parking spaces are insufficient.

Residents

Students

Employees / Business owners



ROAD SAFETY

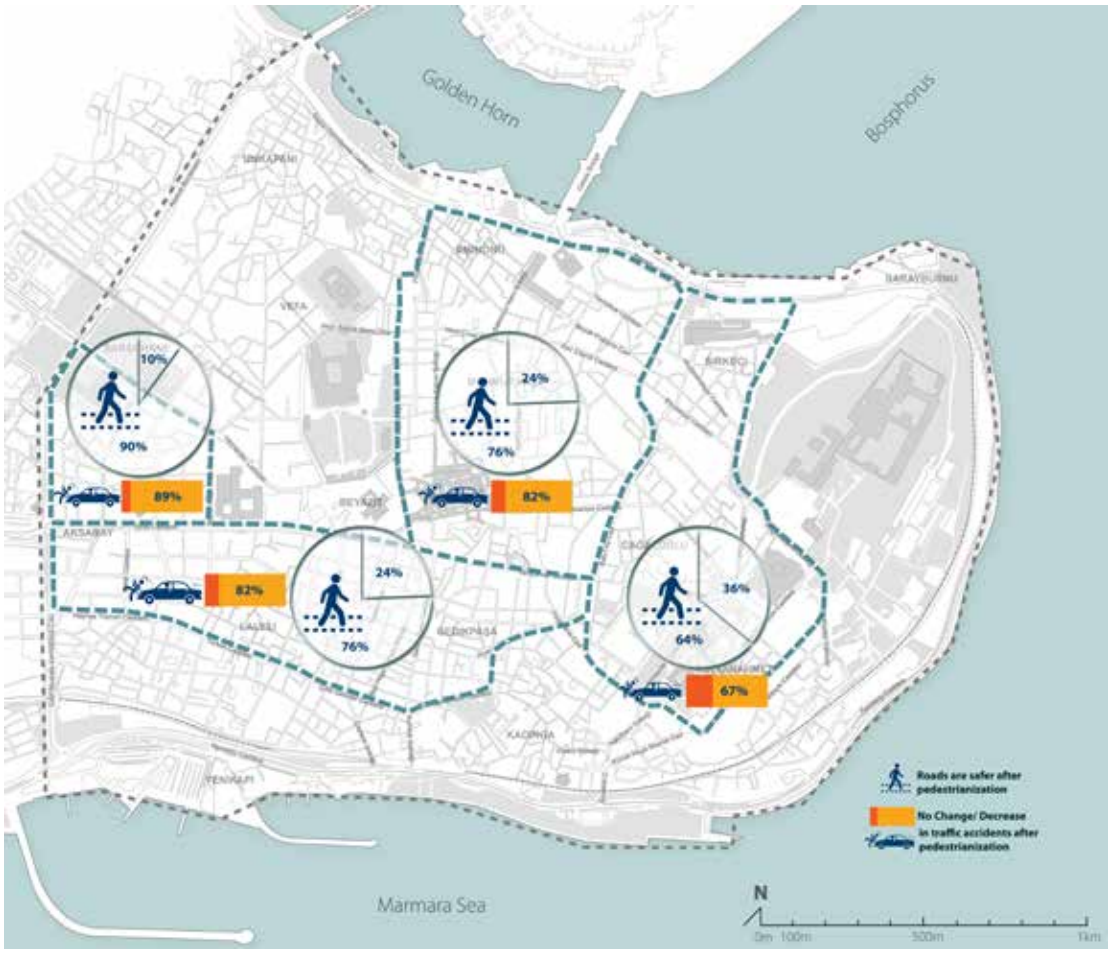
The most critical issue concerning the Historic Peninsula's transportation network manifests itself at the intersections of pedestrianized streets and broad and busy roadways, which are used for various types of traffic and transit services. A total of 383 traffic accidents occurred in the district of Fatih in 2010 (accidents with pedestrians and between vehicles), whereas the number of accidents in 2011 reached 483. It seems plausible to suggest that constraints on vehicular traffic in the historic center caused an increase in traffic on nearby streets. The growing measures restricting vehicle traffic within the Historic Peninsula transferred transit traffic to streets surrounding the pedestrianized area; most conflicts between pedestrians and motorized vehicles occur on these roadways. Although no current data was available for the period following most recent implementations, the surveys revealed that 76% of total respondents felt that the pedestrianization had a positive impact on road safety.

BENEFITS

Respondents to the survey were asked about the benefits of the Historic Peninsula's pedestrianization and were presented with multiple choices. Participants could choose more than one answer. Among residents, the most common benefit reported was increased street safety (68%). Other acknowledged benefits included increased visual quality (58%), strengthened attraction of historical buildings (56%), and improved walkability (52%). The survey also asked about the Historic Peninsula's physical environment post-pedestrianization. Within this context, residents recognized the increase in resting and seating places and road space designated for walking, and improvements to the visual quality of streets. However, respondents mostly thought that there was no change, or a decline, in street lighting, informatory signs and mass transportation opportunities.

Student respondents were also asked to evaluate the benefits of pedestrianization projects in the

Map 3 Road Safety Perspective form Local Business by Sub-Regions




LAUNDRY

Peninsula. Illustrating similarities with the residential survey, 55% of students indicated that pedestrian safety was significantly improved. Improved walkability (51%) and increased visual quality (50%) were also common responses. Student respondents mostly thought resting and seating places, general visual quality of streets and walking environment were improved. However, they also stated that street lighting, informatory signs and mass transportation opportunities deteriorated after pedestrianization.

In the commercial survey, 83% of employees/ business owners identified improvements in walkability as the project's most significant benefit, followed by the increase of visual quality with 82%. 77% of commercial survey respondents thought that streets had become safer for pedestrians. Employees/ business owners confirmed the positive developments in general visual quality of streets, walking environment and street sanitation. Street lighting, mass transportation opportunities, informatory signs and resting and seating places were considered unchanged.

ENVIRONMENTAL QUALITY

In each survey, views on post-pedestrianization environmental quality were divided into four categories: overall disturbance caused by motorized vehicles; vehicle noise; air pollution; and street pollution. Across surveys, respondents predominantly stated that disturbances caused by motorized vehicles, vehicle noise, and air pollution significantly decreased after pedestrianization. Street pollution was generally considered unchanged.

Table 2 Physical Environment After Pedestrianization

		Space For Having Rest	Overall Outlook of Streets	Space For Walking	Street Lights	Cleannes of Streets	Streets Guidance	Public Transport Possibilities
Resident	↑	**58%**	**71%**	**90%**	41%	**59%**	27%	18%
	↔	41%	27%	9%	**58%**	40%	**68%**	**72%**
	↓	1%	2%	1%	1%	1%	5%	10%
Student	↑	**56%**	**72%**	**82%**	46%	**51%**	27%	18%
	↔	40%	22%	15%	**52%**	40%	**63%**	**58%**
	↓	4%	6%	3%	%2	9%	10%	24%
Employe/ Business Owner	↑	33%	**72%**	**77%**	31%	**51%**	17%	26%
	↔	**63%**	26%	20%	**63%**	41%	**74%**	**70%**
	↓	4%	2%	3%	8%	8%	9%	4%

SATISFACTION

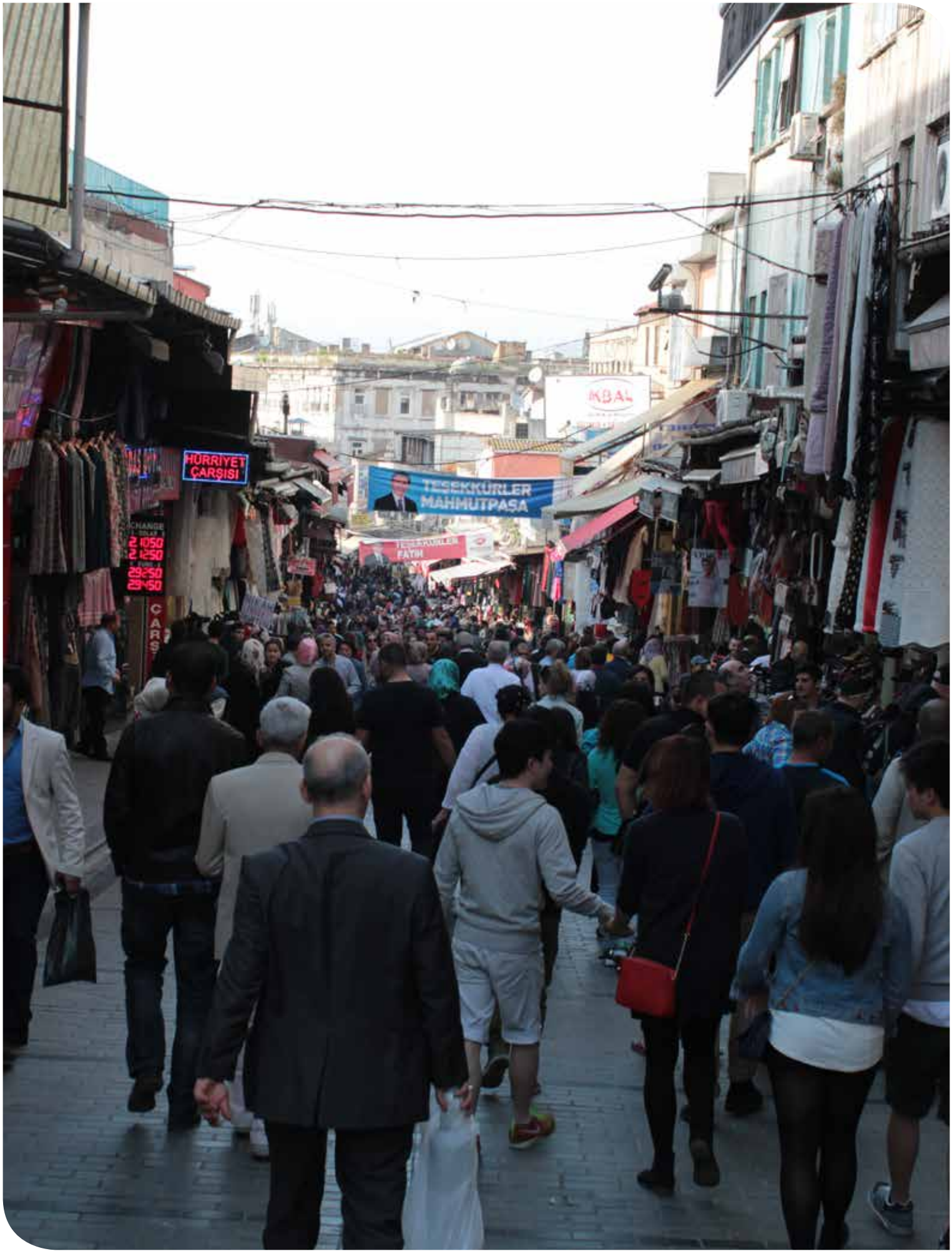
The overall satisfaction of users is the most important factor in evaluating the success of pedestrianization. The surveys show an overall satisfaction rate of 80% among residents, students and employees/business owners.

Additionally, the satisfaction of employees and business owners was analyzed separately, based on the years of service in the area and reactions about the project before and after its implementation. Businesses with a longer history in the area expressed more negative views during the early stages of the project compared to businesses with a 5-10 year history. The same applies to post-implementation rates of satisfaction. While 70% of businesses with over 20 years of history in the area reported satisfaction with the pedestrianization projects, 88% of newer businesses (operating for 5 years or fewer) were satisfied. Compared to initial rates of satisfaction gathered in an earlier EMBARQ survey, “Pedestrianization of Istanbul Historic Peninsula: Views of Local Businesses” (2012), there was a significant increase in the overall satisfaction rates, regardless of the age of the business.

SUGGESTIONS AND ASSESSMENT

Based on the survey results, field observation, existing data, and previous studies of the issue, this report outlines suggestions to continually improve pedestrianization efforts in the Historic Peninsula. These include:

- Providing accessibility for all in the historic peninsula is a prerequisite the essential basic principle underlying all interventions.
- Create common, effective and safe walking routes to enable users to benefit from all opportunities the Historic Peninsula has to offer.
- Put in place traffic calming policies in the Peninsula and develop an integrated mass transportation system to increase its efficiency.
- Study current routes used by private vehicles and particularly tour busses, in order to implement a holistic plan and management of their travel routes.
- Mass transportation on the Historic Peninsula should be subjected to an integrated planning process in order to create a system that will both feed the immediate area and connect it with other centers.
- Present tourists with multiple travel modes choices to reach and tour the Historic Peninsula, such as minibuses, light rail systems, walking and cycling routes.
- Create an urban design guideline for the Historic Peninsula as a whole, one that bases design on the specific identity and character of the streets. Streets that are exclusive to pedestrian use must be designed to reflect this specific function.
- Frequently used streets within the historic peninsula should be identified and services such as street art applications, seating and resting places and green spaces should be provided to meet people's needs.
- Re-plan parks on the shore of the Historic Peninsula in terms of their physical and visual interaction with the water and develop their recreational qualities.
- Informational signage must be installed at intersections, especially direction signs and way-finding information. .
- Urban elements, such as benches, artwork, pavestones, lighting and greenery, should be unique, distinguishable and characteristic of their environment, and be installed on main routes for easy discernment even from afar.
- Street lighting should enable streets to continue performing their function as vital veins of urban life at night. Squares should be illuminated so that their physical and visual characteristics are highlighted and various activities can be carried out.
- Resting and seating places, patches of plants, trash bins, lighting fixtures, street paving and indication signs are immediate critical components of streets and their implementation is vital to creating a safe and pleasant public space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OVERALL EVALUATION

Istanbul Historic Peninsula Pedestrianization Project's scope, area of implementation and affected population indicate its tremendous scale. Given that the project only became fully operational three years ago, some outstanding issues remain. However, the overall satisfaction rate was very high among users, and additional issues may be resolved with the continued use of collected feedback. The satisfaction rates could also be improved through continued planning, enforcement, and changes to the built environment. Sustainability of the project over time will only be achieved by developing community ownership. Users should view the streets as their 'living space'. Designing better, safer, more accessible, and visually appealing- streets with improved environmental and physical qualities will be instrumental for increasing the level of satisfaction amongst urban users.

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