DATA-DRIVEN DECISION MAKING AND POLICY DEVELOPMENT

TESEV

Bernard van Leer
FOUNDATION

DATA-DRIVEN DECISION MAKING
AND POLICY DEVELOPMENT

TESEV

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1st INTRODUCTION:

DATA-DRIVEN DECISION MAKING
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The majority of the world population now lives in cities, while relations between technology and individuals and institutions and things are stronger than ever. The resultant growth in the volume and diversity of data has rendered the issue of data-driven policy development, which has been in existence since the 1990s, much more visible. We can define the concept of data-driven decision making as institutions that provide urban services making use of data to develop accurate, effective and measurable policies when planning how, to whom, with what content and where in the city these services will be provided. This has recently become an important topic in Turkey. We frequently encounter the importance especially of local administrations making use of data when making and following their strategic plans.

In order to make use of data in developing urban policy, we first of all need to have a sense of what urban data is and the channels by which it is produced, providing us a holistic perspective. We can usually speak of five types of data in this context: The first is public administration data produced by local administrations and state agencies. The second is official statistical data such as census or household/workplace surveys gathered through questionnaires under the direction of the national statistical institute. The third is operational data on services provided by local administrations or specific institutions – institutions providing transportation service for example. The fourth is scientific data on environmental conditions such as the air, water level, pollution and noise. The fifth consists of composite indicators or estimates produced through combining and analyzing these four types of data. While most of the data in urban dashboards consist of traditional data updated monthly or yearly, operational and scientific data's level of inclusion of real time big data in particular is increasing.

It is impossible however for raw urban data to be made legible without being subjected to any analysis and/or visualization. Rendering data comprehensible to decision makers and other employees of local administrations as well as city residents has recently been made possible with digital tools that are multiplying by the day. Some of these tools, which enhance the perception and knowledge that city residents have of the city and which increase data literacy take the form of open data platforms and urban dashboards.[1] Despite some of their limitations, these tools allow everyone to monitor the city and evaluate the services of local administrations. Along with this, these digital tools can also serve to strengthen and accelerate the communication between the units of the same local administrations, between different local administrations, as well as between local administrations and central government.

The Data-Driven Policy Tool Project is run by the Turkish Economic and Social Studies Foundation (TESEV) with the collaboration of the Kadir Has University Istanbul Studies Center and the support of the Bernard van Leer (BvL) foundation within the scope of the Urban95 program. The harita.kent95.org website is an output of this project and is among the leading examples in Turkey of the new digital tools current. The Urban95 platform displays the types of social assistance and services of local administrations geared towards children and parents in three project cities (Istanbul, Izmir, Gaziantep) on maps which depict the demographic and social characteristics of these cities. While not yet of an open data platform or urban dashboard quality, the platform is genuinely able to present complex databases in a legible form to decision makers and city residents. While the platform was built over the year 2016 in order to display and monitor the services and types of assistance provided by Istanbul district municipalities, its scope has expanded with time.

The purpose for writing the guidebook you are holding is to explain the Urban95: Data-Driven Policy Tool. Before presenting this tool, we would like to begin by introducing some of the policy tools from around the world that were created to render data meaningful. We think that having more concrete knowledge about these tools will emphasize the purpose and characteristics of the Urban95 tool as well. Following these concrete examples, we will expound the content of the harita.kent95.org website in reference to three project cities. Finally, we will present the administrative panel designed to serve the purpose of updating the data that is of crucial importance for the sustainability of our policy tool. We hope that with the contributions of local administrations, we can expand this policy tool in terms of content and develop it by keeping the data up to date.

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[1] Erginli, B.E. ve Tülek, M. (2020), Kentsel Politikanın Desteklenmesi İçin Yeni Araçlar: Açık veri platformları ve dijital kent panelleri [New Tools to Support Urban Policies: Open data platforms and urban dashboards], TESEV Press.

2nd SECTION
POLICY TOOLS CREATED BY RENDERING DATA MEANINGFUL

It is possible, today, to access numerous tools and projects developed for data-driven decision making on the Web. This section will present five different tools that enable policymaking thanks to social, environmental and transportation related data.
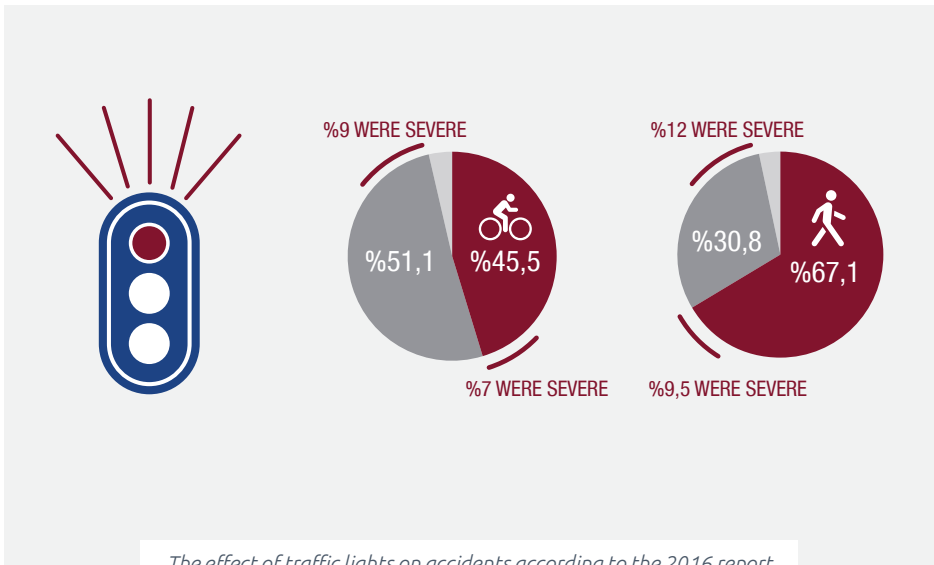
2.1. Vision Zero, Seattle

"Vision Zero", which emerged in Sweden in the 1990s, is a project that aims to enable safe transportation for all in the city.[2] Following the success of the initiatives in Sweden and other European cities, the project's goal today has been determined as reducing the number of pedestrian and bicycle accidents in the USA to zero. In order to achieve this, Vision Zero first of all aimed to understand where and why the accidents are taking place. The first step of Vision Zero in the USA which was launched in Seattle has been to make the traffic accidents involving pedestrians and cyclists between the years 2007 and 2014 into a dataset and analyze it.[3] The results of this analysis have shown where in the city accidents are more frequent. At the same time, it has allowed identification of the physical characteristics of the places where there are more accidents than the average. The results obtained have been published as reports, thereby presenting a decision-making tool that lists the possible causes for traffic accidents. For example, according to the 2016 report, the analysis revealed that accidents that affected pedestrians took place more frequently at intersections with traffic lights, whereas traffic lights reduced accidents involving bicycles.

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[2] https://visionzeronetwork.org/ (Date of access: 2020-09-16)

[3] Seattle Department of Transportation, 2016, City of Seattle Bicycle and Pedestrian Safety Analysis, Access: https://www.seattle.gov/Documents/Departments/SeattleBicycleAdvisoryBoard/ presentations/BPSA_Draft_Public_093016.pdf (Date of access: 2020-09-16)

Pedestrian intersection crashes more likely to happen at locations with traffic signals.

%9 WERE SEVERE

%51,1 %45,5

%7 WERE SEVERE

%12 WERE SEVERE

%30,8 %67,1

%9,5 WERE SEVERE

*The effect of traffic lights on accidents according to the 2016 report*

In the second stage of the project, a report has been published which includes the measures needed for planning the city according to results of the analysis.[4] Today, the Seattle Municipality is working on many new projects in line with the information in this report.[5] The goal is to reduce the number of accidents through new plans prepared on regional levels in places like "Highland Park" or "23rd Street" that were identified by the analyses as risky.

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[4] *Seattle Department of Transportation, 2020, City of Seattle Bicycle and Pedestrian Safety Analysis Phase 2, Access: http://www.seattle.gov/Documents/Departments/SDOT/VisionZero/SDOT_Bike%20and%20Ped%20Safety%20 Analysis_Ph2_2420(0).pdf (Date of access: 2020-09-16)*

[5] *http://www.seattle.gov/visionzero/projects (Date of access: 2020-09-16)*

2.2. Open and Transparent Water Data, California

Following a five-year drought, California signed into law the 2016 Open and Transparent Water Data Act to protect the sustainability of existing water sources.[6] Aiming to prepare water management, ecology, land use and agriculture datasets and make them accessible with this law, California collaborated with government institutions and conducted studies to that end. Data created through workshops and calls for open data have both been published on the Internet and also visualized as a result of competitions put together through open calls.

California Water Quality Portal, 2019 Winners [7]
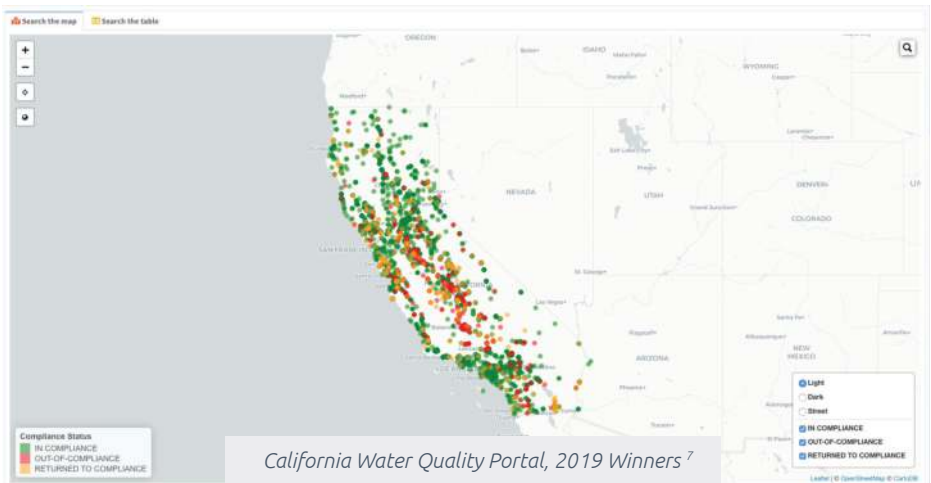
The data and visualizations that have been created allowed certain decisions to be taken regarding protecting water sources and groups that have limited access to water. The consortium that has assembled this year, *the Internet of Water Project* and plans drawn up that aim to protect the water sources of the Sacramento River basin and fish diversity can be cited among the decisions taken.[8] With the ongoing project, The California Government plans to provide clean and drinkable water to all Californians by working on developing, updating and visualizing the existing data.

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[6] *https://www.arcgis.com/apps/MapJournal/index.html?appid=50323246e8d148a0a504038a0d40fb7f#*
(Date of access: 2020-09-16)

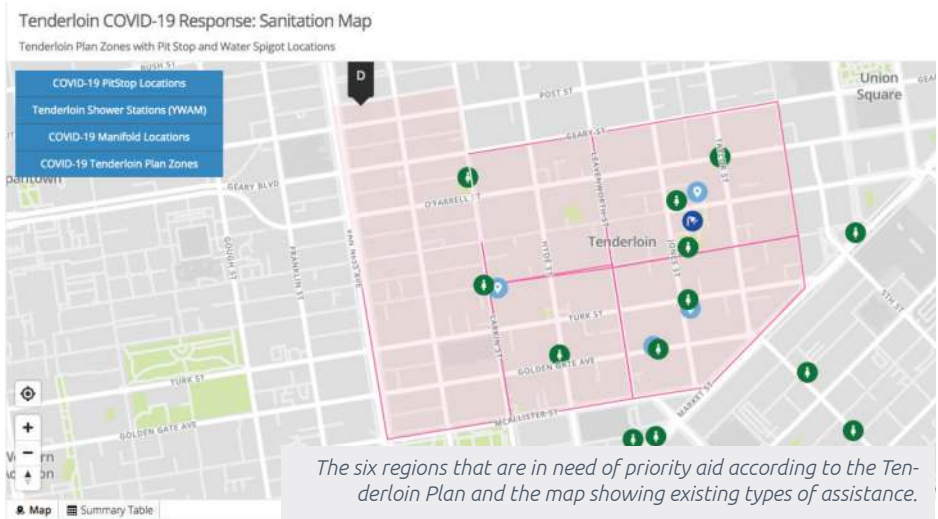[7] *https://waterchallenge.data.ca.gov/2019winners/ (Date of access: 2020-09-16)*

[8] *UC Water Initiative, 2018, Data for Water Decision Making, Access: https://www.law.berkeley.edu/wp-content/ uploads/2018/01/DataForWaterDecisionMaking.pdf (Date of access: 2020-09-16)*

2.3. Covid-19 Assistances, Open Data, San Francisco

As seen in the example of California, changes in environmental conditions create the need for new datasets and policy tools. The pandemic period that we are still in has also motivated work towards tools to aid in decision making on avoiding the spread of the disease and issues such as social assistance. The Covid-19 data and assistance map prepared by the City of San Francisco constitute an example regarding the topic.

The City of San Francisco has primarily worked on the dataset that includes Covid-19 patients and the contagion areas of the virus. Today it is possible to access this data digitally, as well as visualize it by means of the tables on the San Francisco open data web site.[9] In addition to collecting data on the number of patients, the City of San Francisco is also conducting studies to identify areas that are vulnerable to the virus. Intensified health scans and other types of assistance are being planned for these areas that are identified according to basic health indicators evaluated under five headings.

One of the areas that have been identified as vulnerable to the virus according to basic health indicators is the Tenderloin Region where the minority population is concentrated in.[10] Following this assessment, the region has been analyzed on a per-block basis and it has been noted that virus activity has concentrated in six priority areas.
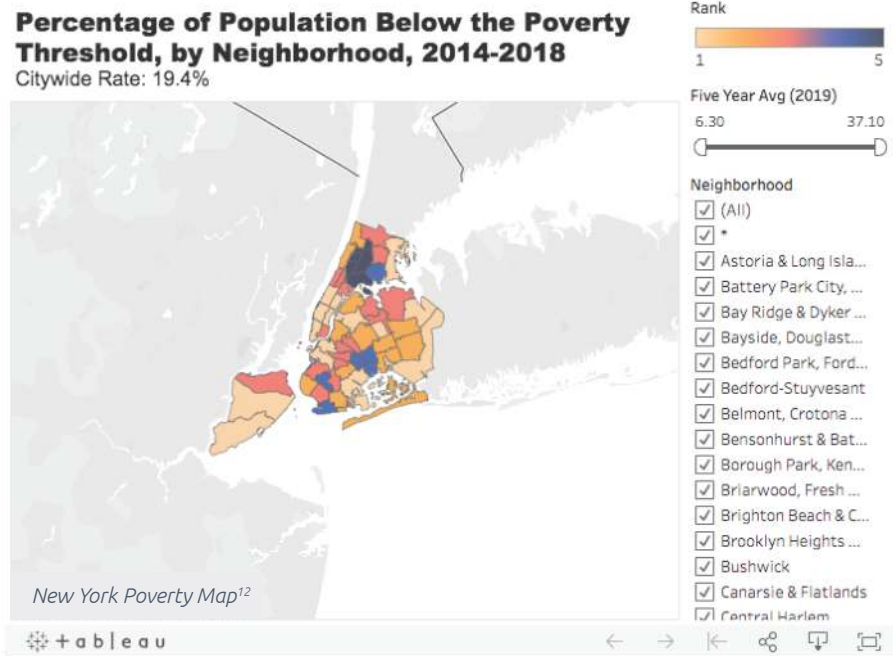

The six regions that are in need of priority aid according to the Tenderloin Plan and the map showing existing types of assistance.

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[9] https://datasf.org/ (Date of access: 2020-09-16)

[10] https://data.sfgov.org/stories/s/Tenderloin-Plan-Data-and-Reporting/sc96-u6ry/ (Date of access: 2020-09-16)

Covid-19 health points, shower areas and markets have been opened in these areas and homeless persons have been provided accommodation assistance in the form of tents. All these types of assistance have been published as a dataset as well as being mapped through an interface that can be accessed by all. While the maps have made it easier for those in need to access the assistance they require, they have also served as a tool for tracking these types of assistance as part of decision-making mechanisms.

2.4. Poverty Data, New York

The City of New York assembles regular poverty data every year. As distinct from official data, this dataset takes the poverty threshold calculated through the difference between housing cost and household income as the main indicator, and is used to map the poverty level of the city. The maps are published online while the data is made open to public access on the New York open data platform.[11]

Percentage of Population Below the Poverty Threshold, by Neighborhood, 2014-2018
Citywide Rate: 19.4%

Rank
1   5

Five Year Avg (2019)
6.30   37.10

Neighborhood
☑ (All)
☑ *
☑ Astoria & Long Isla...
☑ Battery Park City, ...
☑ Bay Ridge & Dyker ...
☑ Bayside, Douglast...
☑ Bedford Park, Ford...
☑ Bedford-Stuyvesant
☑ Belmont, Crotona ...
☑ Bensonhurst & Bat...
☑ Borough Park, Ken...
☑ Briarwood, Fresh ...
☑ Brighton Beach & C...
☑ Brooklyn Heights ...
☑ Bushwick
☑ Canarsie & Flatlands
☑ Central Harlem

New York Poverty Map[12]

The City of New York is using the poverty data that has been gathered and the maps prepared with this data as a guide for the assistance that it will carry out. According to the 2018 Poverty Measure Report, municipal assistance has been planned with consideration given to the distribution of the poverty threshold calculated by use of the data.

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[11] https://www1.nyc.gov/site/opportunity/poverty-in-nyc/poverty-data.page (Date of access: 2020-09-23)
[12] https://www1.nyc.gov/site/opportunity/poverty-in-nyc/poverty-in-nyc.page (Date of access: 2020-09-23)

With the impact of pandemic conditions bearing down, steps have been taken to raise the minimum wage; introducing minimum wage regulation for cab drivers within New York who work through phone apps.[13] Assistance has been provided to low income families and at the same time, a new tool has been designed to make families aware of and apply for assistance.[14]

2.5. Flooding Data, Amsterdam

The Amsterdam Rainproof project was started in response to a series of floods in 2014.[15] Amsterdam Rainproof has been founded with the recognition of a need for measures that involve both official institutions and those who live in the city if floods are to be prevented. This network, which consists of government officials, NGOs and city residents started the project by identifying the locations of flooding. Data on past floods have been gathered and dangerous areas mapped accordingly.
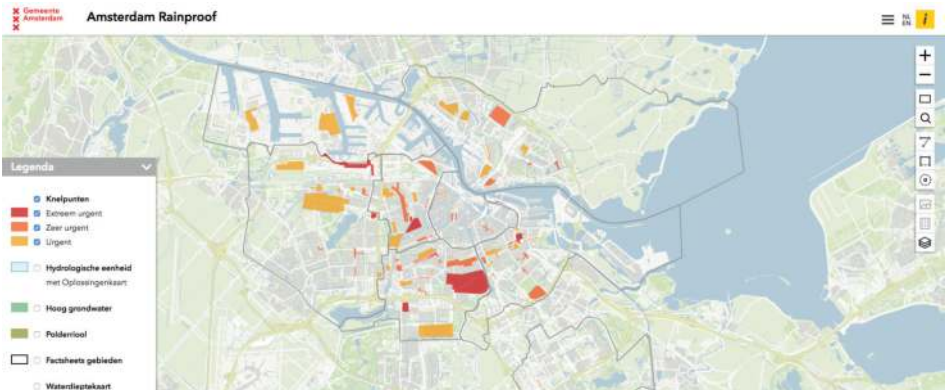
With the map also being published online, city residents have been made to learn the degree of risk in the region they live in.[16] The organization has created a website that communicates the steps taken by the government, as well as the individual measures that can be taken in risky areas that have been identified through the gathered data and the map.[17] The website contains the measures people living in Amsterdam can take regarding the buildings, yards or squares in their own environment. It lists both personal measures and decisions concerning the matter taken by officials as they appear in drainage and city plans.

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[13] *New York Mayor's Office for Economic Opportunity, 2020, New York City Government Poverty Measure 2018.*
  Access: https://www1.nyc.gov/assets/opportunity/pdf/20_poverty_measure_report (Date of access: 2020-09-23)
[14]*https://access.nyc.gov/ (Date of access: 2020-09-23)*
[15]*Ovink, Hank, 2020, "Amsterdam Rainproof: sharing knowledge", Amsterdam Rainproof Magazine.*
  Access: https://www.rainproof.nl/sites/default/files/rainproof-magazine-engels.pdf (Date of access: 2020-09-25)
[16] *https://maps.amsterdam.nl/rainproof/*
[17] *https://www.rainproof.nl/*

2.6. The Light the Dark National Campaign, Turkey

Light the Dark was planned as a part of the "16-Day Activism" campaign organized by UN Women, and was launched alongside the International Day for the Elimination of Violence against Women on the 25th of November in 2019. The aim of the project is to produce a map of incidents of inequality and gender-based violence experienced by different social groups in their daily lives in public space, in order to render public spaces safe for women and girls.[18] A website, www.atesbocekleri.info visualizes the perception of safety in public space. On this website, users are able to mark public spaces where they do not feel safe on the map with a firefly and add the reason for their distrust as a comment.
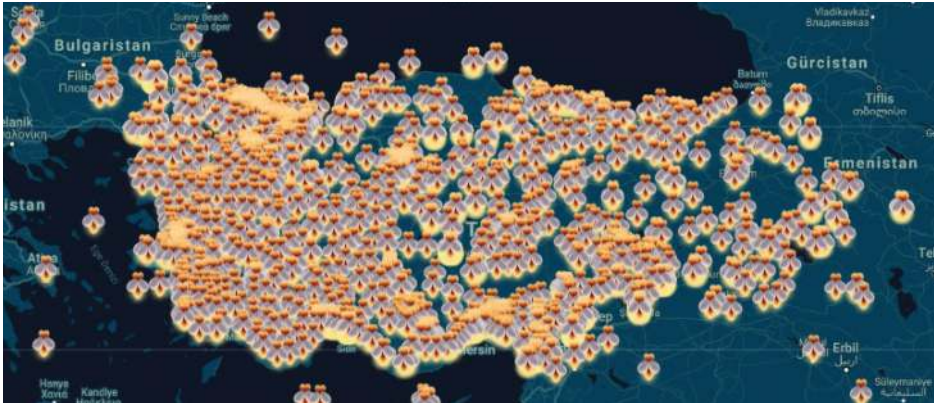
In the Light the Dark project, data is collected through public participation, gathered in a digital environment and instantaneously visualized. According to project outcomes, fireflies have been marked on 14,536 spots across Turkey. It has been identified that 60% of users were female and 6% were male while 34% have preferred not to state their sex.[19] The data collected on the website has also allowed identification of places that have been marked frequently, along with the reasons why they were marked. While Istanbul, Ankara, Izmir and Bursa have been the provinces most frequently marked, in-sufficient lighting and verbal/physical harassment are among the primary concerns and complaints. In places identified, meanwhile, efforts have been made to increase the level of safety through communication with municipalities. Needed lighting fixtures have been installed in major locations marked in Beşiktaş for being dark and an exhibition of lighting installations has been held in the Ankara Seğmenler Park in order to draw attention to violence against women.[20]

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[18] http://www.atesbocekleri.info/
[19] UN Women, 2020, "Karanlığı Aydınlat Ulusal Kampanyası Özet Raporu ve Veri Analizi" [The Light the Dark National Campaign Summary Report and Data Analysis].
[20] Beşiktaş Municipality, 2020, "Aydınlık ve Güvenli Sokakları Birlikte İnşa Ediyoruz" [Together We Are Building Bright and Safe Streets], Access: https://www.youtube.com/watch?v=E0F7A7AOQEY (Date of access: November 6, 2020)

3rd SECTION
URBAN95: THE DATA-DRIVEN POLICY TOOL PROJECT

The Data-Driven Policy Tool Project run by the Turkish Economic and Social Studies Foundation (TESEV) with the collaboration of the Kadir Has University Istanbul Studies Center and the support of the Bernard van Leer (BvL) foundation within the scope of the *Urban95* program, aims to create an inventory of types of social assistance and services of local administrations geared towards children and parents in three project cities (Istanbul, Izmir, Gaziantep) and to map these on layers that will provide insights into social needs. The ultimate goal of the project is to support decision makers in creating data-driven social policies.

3.1. Data-Driven Policy Tool Project in the BvL Foundation's Urban95 Program

The Bernard van Leer Foundation was established in 1949 to work in the field of human development and has focused its efforts on early childhood development since 1965. In recent years, it has been conducting its activities with the particular aim of developing services and opportunities for socially and economically disadvantaged children under the age of 8. The most comprehensive among the active fields of investment of the foundation is the Urban95 project. This project aims to increase quality of life in the most important period in child development, which is early childhood, by ensuring that economically disadvantaged children and parents who live in cities make active use of services oriented towards the fulfillment of basic needs like education and healthcare. The Urban95 project aims to engage in a discussion with city-related decision-makers on how looking at cities from the perspective of a healthy three-year-old's approximate height of 95 cm. can make a difference in the planning of the city, public services and urban infrastructure.

The project has various areas of focus. Designing and spreading green spaces and play areas of the kind that little children can utilize throughout the city; providing healthcare, education and recreation services at distances easily accessible to children and their adult guardians while prioritizing economically disadvantaged groups who live in various parts of the city; providing coaching to parents concerning techniques that will positively influence the mental development of children; and the gathering and mapping of relevant data at the neighborhood level to identify where all these services are needed the most so decisions can be made accordingly are among the main areas of focus of the project. Some information that has come to the fore regarding the Data-driven Policy Tool interactive platform is presented below. The platform serves the Data-driven Decision-Making Processes study which is a main area of focus of the Urban95 project which has so far been designed for Istanbul, Izmir and Gaziantep.

3.2. The Scope of the Platform

3.2.1. Underlay Maps

In the first stage of *Urban 95 - Data-Based Decision-Making Processes*, the spatial data indicating the areas where the needs of children and parents are relatively more concentrated, have been collected and mapped. Finding and mapping the relevant demographic and socio-economic data along with their spatial distribution is a difficult process. At this stage of the project, the Istanbul Studies Center of Kadir Has University used creative and innovative methods to constitute the datasets and then mapped them.

Metropolitan provinces and their districts were mapped according to the categories obtained by analyzing the variables of age and market value,[21] using the neighborhood underlays valid in the geographical information system (GIS) environment.[22] The maps that show the neighborhood categories obtained in this way clearly display the distribution of the child population among the districts, along with the income differentiation between districts and neighborhoods. There are some points to pay attention to while reading these maps. The neighborhoods on these maps with the greatest concentration of child population may not correspond to those where the highest numbers of children reside. The neighborhoods with high total populations naturally also have high child

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[21] Due to TÜİK not gathering income data on the neighborhood level and the lack of any reliable source for neighborhood-based income data, street real estate value data of district municipalities published on their own websites have been used as a proxy variable in place of the income variable. It is assumed that the market value variable will correspond to a large extent to the income variable.

[22] Neighborhood based age group data used in the maps produced by the Kadir Has University Istanbul Studies Center have been acquired from TÜİK's Address Based Population Registry System. This data has been processed by the Simple Correspondence analysis method, and age groups which demonstrate statistically significant concentration in neighborhoods have been identified. The average real estate market values of neighborhoods have been calculated based on the 2018 m² real estate value numbers of streets accessed through the e-municipality tabs on the websites of district municipalities. After calculating average real estate values for each neighborhood, neighborhoods have been weighted with their populations and grouped according to these values. Synthesis maps have been formed by overlaying age group maps with real estate value groups. These maps have been produced for both provinces in general and for each district separately. Therefore, the weighting and relative stratifying operations of neighborhoods have been done on two levels; the province level and the district level.

populations. The neighborhoods have been grouped according to the concentration of age groups they house, compared with the district as a whole, and they have been colored on the map according to this grouping. For example, if the map underlays showing market value and age groups together indicate a high concentration of child population between the ages 0-4, the ratio of the 0-4 aged children to the total population of children in this neighborhood is higher than the same ratio in the other neighborhoods. It is very important that when decision makers are planning the services and infrastructures they are aiming for in a particular neighborhood, they recognize not only how high the number of children is in that particular neighborhood, but also the proportion of its child population in relation to the other age groups, and the approximate market value (income level). For if out of two neighborhoods with high concentrations of child populations, one is in a much lower market value category than the other, the need for free public services in that neighborhood may be much more urgent than in the other one. Another advantage of maps representing all age groups according to this same logic is that they make it possible to observe the coexistence of different age groups. For this reason, the maps have the character of a synthesis guiding the services to provide for the other age groups as well, in addition to the policies to develop for children. Since the neighborhoods with high concentrations of elderly groups, for instance, can also be observed by means of the same maps, they can also be consulted while services oriented toward the elderly are being determined.

In addition to the maps that synthesize market value and age groups, in order to show the child population rate in a simpler form, maps showing the ratio of the 0-4 aged child population in the neighborhood to the 0-4 aged child population in the entire district have also been presented in the interactive platform as an underlay map alternative at the neighborhood level. Neighborhoods with high concentrations of children can be observed independently of market value (income level) by using this underlay.

In 2020, education maps were added to the underlay maps. The 2019 data[23] on the distribution of the population over the age of 19 with respect to education level was analyzed on the neighborhood scale, as in the age and market value maps. Using the categories yielded by the analysis, the distribution of high, middle, and low education levels in the city was represented visually. The fact that the population in question is over 19 helps understand the current education situation in the neighborhoods beginning with the age when one can graduate from high school. The maps were prepared separately for the female, male, and total populations. In this way, the differentiation of neighborhood education levels according to gender was made observable.

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[23] *Education data has been provided by TÜİK. In order for education levels to be clearly readable on the map, the data has ben categorized under these five headings: those who are illiterate and those who are literate but not graduated from any school; primary school graduates; middle and high school graduates; university graduates; unknown.*

3.2.2. Database

TESEV supervised an inventory of services and assistance oriented toward children and parents. In addition to the information gathered from all of Istanbul's district municipalities in 2017, data about the services of the Istanbul Metropolitan Municipality, about public and private preschool education, and about health institutions were gathered through certain variables. Service and assistance data provided by the Izmir Metropolitan Municipality and Izmir central district municipalities were also included in the database. It was possible to constitute a detailed database since the municipal service and assistance data was gathered by means of a very comprehensive survey. However, the data about the public and private educational and health services is not equally detailed.

The dataset gathered by survey consists of two main parts. The first of these is the services provided by the municipalities, the second is the social assistance given by the municipalities. Municipality services encompass nurseries / kindergartens / daycare centers aimed at children aged 0-8 and/or their families, other service units aimed at children, health units, psychological counseling centers, shelter houses, vocational courses or public education centers and other service units. It is important to have data on the infrastructures of these units and the capacity of personnel working in these units. Data has been gathered on these municipality service units including the names and open addresses, number of rooms, total spaces, number of users, ages of users, fee status, the amount of fees for applicable services, opening and closing hours and the educational status and professions of personnel for each of them. Municipality social assistance schemes meanwhile encompass many diverse forms of aid that vary according to municipality such as cash transfer, food, clothing and baby package. The distribution data according to neighborhoods on the number of persons or families benefiting from the assistance has been gathered for each form of assistance. Additionally, the data on the amount of assistance in TL terms has also been acquired. In addition to this data which has been gathered separately for each municipal service and assistance, data has also been gathered on the profiles of those benefiting from each form of service and assistance, the methods used by municipalities to reach beneficiaries, and how the needs of the beneficiaries have been determined. Once again, information has been gathered on the general strategies of municipalities for each type of service and assistance.

3.2.3. harita.kent95.org

The prepared inventory of services and assistance was placed on the underlay maps. This was done in a way in which they can provide information on the regions where the need for such services and assistance is relatively high. The most concrete output of the Urban95 project is the interactive platform accessible at "harita.kent95.org" where all of these project stages are presented in unison. Layers which constitute the background of the Urban95 map are able to present in spatial format, using innovative and creative

methods, the demographic and socio-economic data on areas where data is normally hard to find. In other words, the presentation of precisely that background information needed for evaluating the distribution of services and types of assistance sets this project apart from similar prior mapping processes.

By visiting the http://harita.kent95.org address, one can access the About the Project, How to Use and Contact pages. On the homepage, there are separate tabs for the provinces of Gaziantep, İstanbul and İzmir.
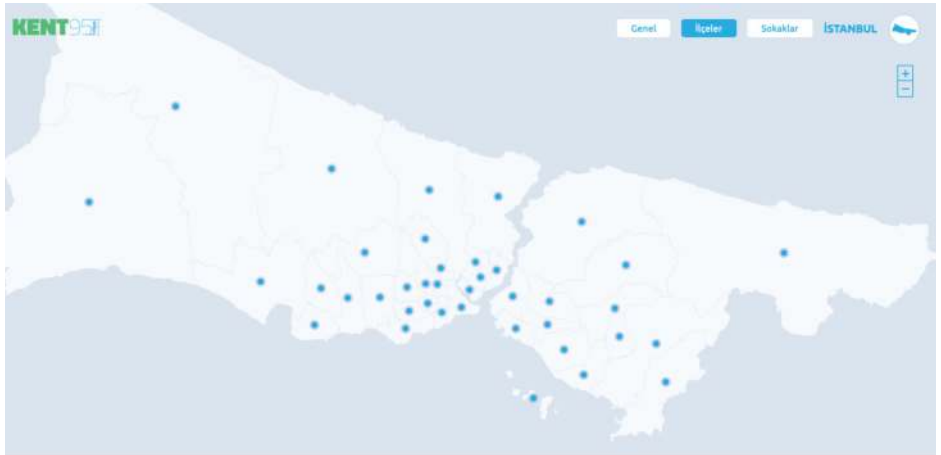
When one clicks on any of these provinces, a page containing the province map and the tabs General, Districts and Streets appears.

When one clicks on General, the 2018 Age and Market Value map of the province is displayed. It is possible to select and display the 2016 version of this map from the lower left corner of the page. It is also possible to display the Child Population Rate maps for 2018 and 2016 in the form of the ratio of the 0-4 age population in the neighborhood to the 0-4 age population in the province. It is also possible to display Educational Attainment maps for the female, male and total population for 2019. When the neighborhoods in the interactive maps are clicked on, detailed information on the age group profiles, market values, child population rates and educational attainment profiles of the neighborhoods can be accessed.


By clicking on the tabs located on the upper right of the General page, the location of the services provided can be displayed on the map. Below the Pre-school Education and Health tabs, in addition to the services provided by the metropolitan and district munici-

palities, public and private services are also displayed. The Other Services tab includes only those of metropolitan and district municipalities. The title of the service can be accessed by clicking on the service icons on the map. According to preference, the services can be displayed on the age-market value maps, the child population rate maps or the educational attainment maps. Under the Assistance tab, one can find the maps showing the distribution of the types of assistance provided by the metropolitan municipality among the neighborhoods. By clicking on the neighborhoods in the Assistance tab, information can be accessed about the amount of assistance, to how many households/people it is provided, and in which group in the age/market value maps of the neighborhood it is included.
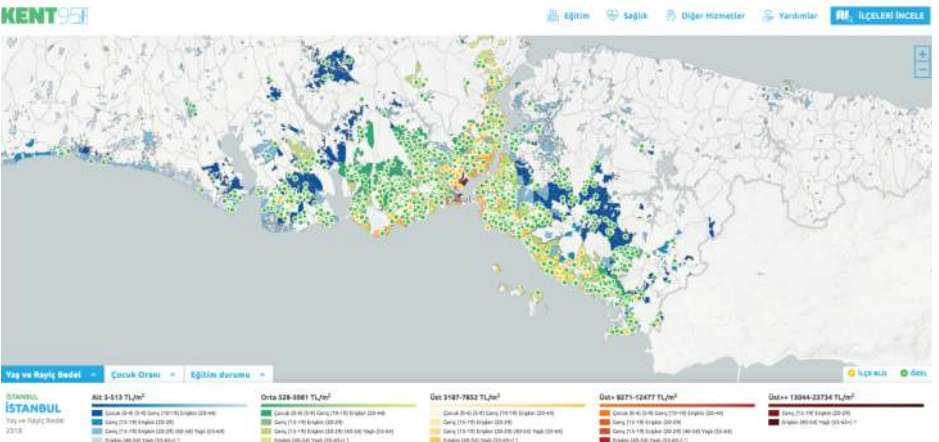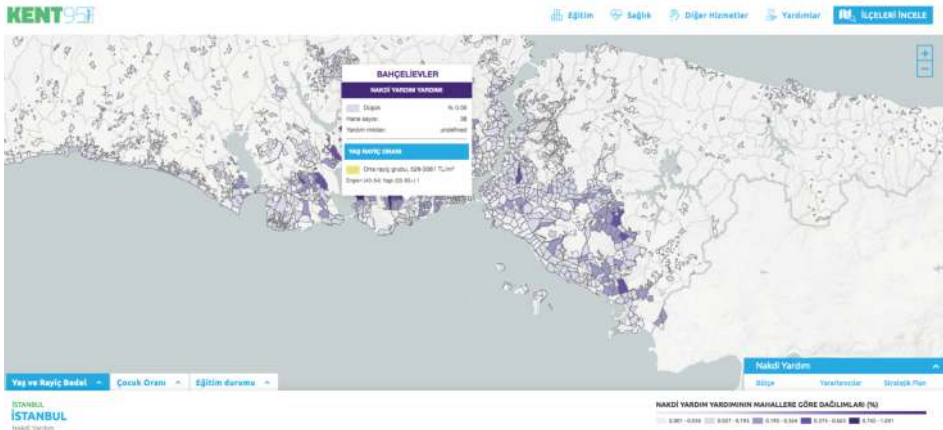
The EXAMINE DISTRICTS button on the upper right leads to the Provinces tab on the homepage. The province map showing the districts is to be found there. By selecting any district, detailed information on the district can be accessed.
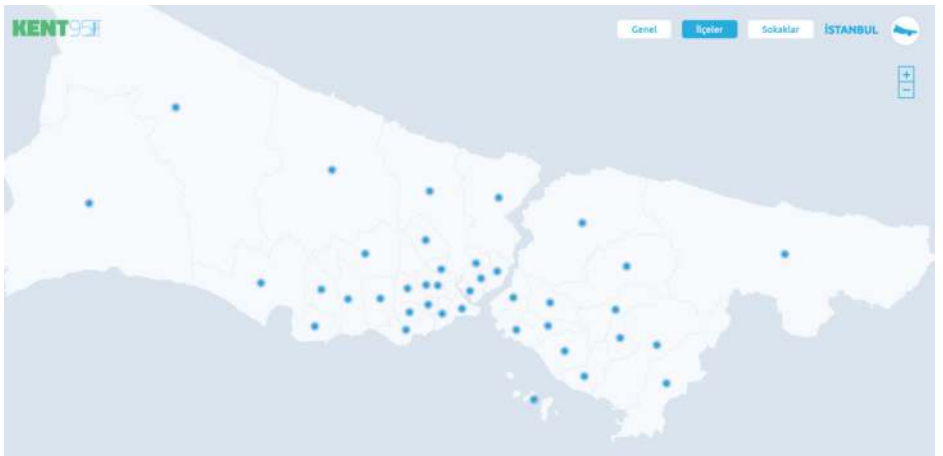
When any district is clicked, the 2018 Age and Market Value map of the district is displayed. It is possible to select and display the 2016 version of this map from the lower left corner of the page. It is also possible to display the Child Population Rate maps for 2018 and 2016 in the form of the ratio of the 0-4 age population in the neighborhood to the 0-4 age population in the district. When the neighborhoods in the interactive maps are clicked on, detailed information on the age group profiles, market values, and child population rates of the neighborhoods can be accessed.
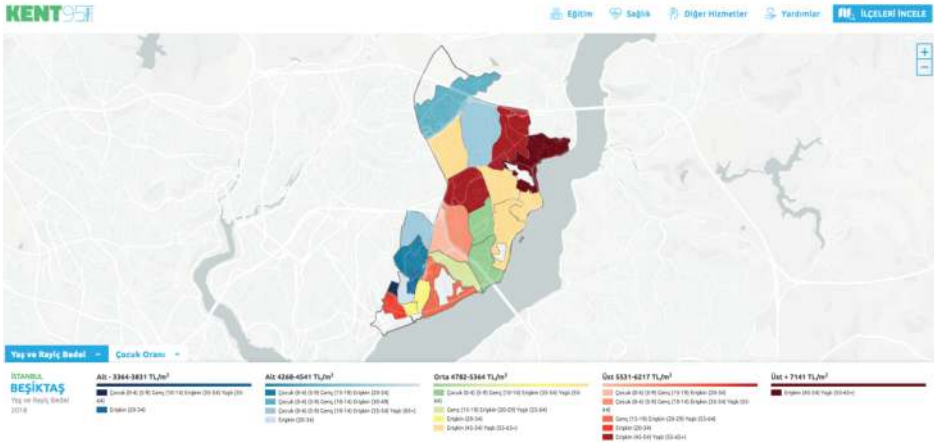
By clicking on the tabs located on the upper right of the Districts page, the location of the services provided can be displayed on the map. Under the Pre-school Education and Health tabs, in addition to the services provided by the metropolitan and district municipalities, public and private services are also displayed.
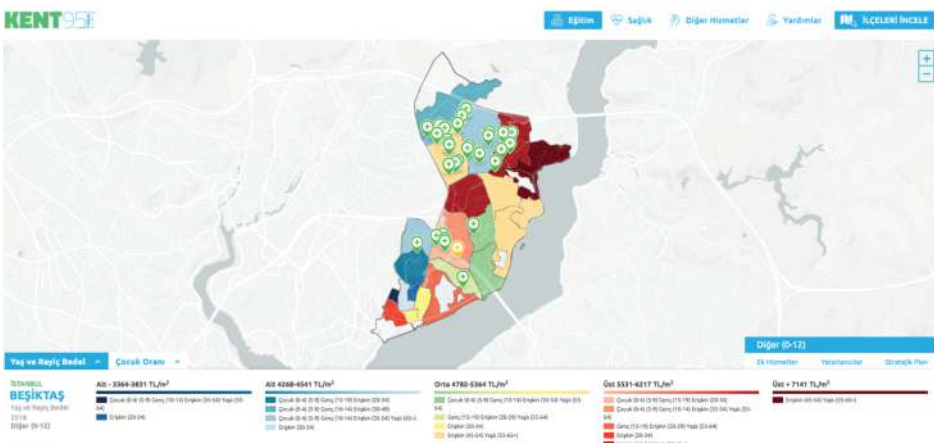
The Other Services tab includes only those of metropolitan and district municipalities. According to preference, the services can be displayed on the age-market value maps or the child population rate maps.
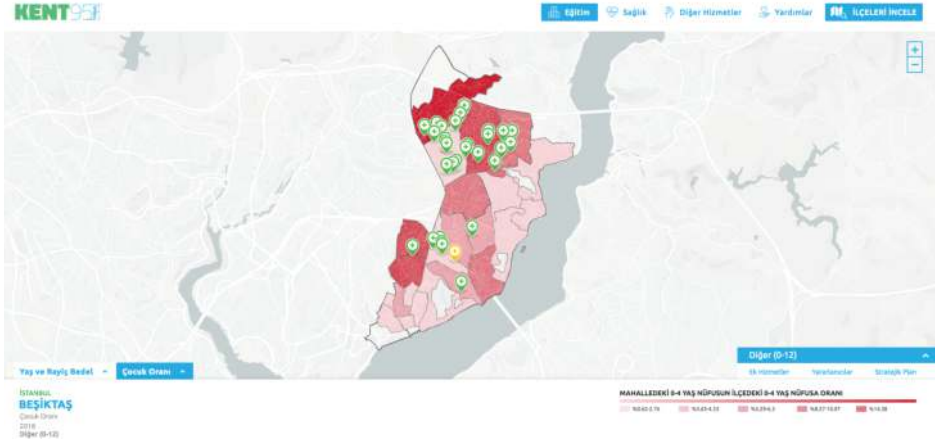
After clicking on a service on the map, detailed information on the service unit can be reached by clicking on the Click for description tag button. Information on the Metropolitan Municipality and District Municipality service units is more detailed than public and private service data. However, services provided by some district municipalities could not be included because not all the district municipalities were able to participate in the survey included in the project.
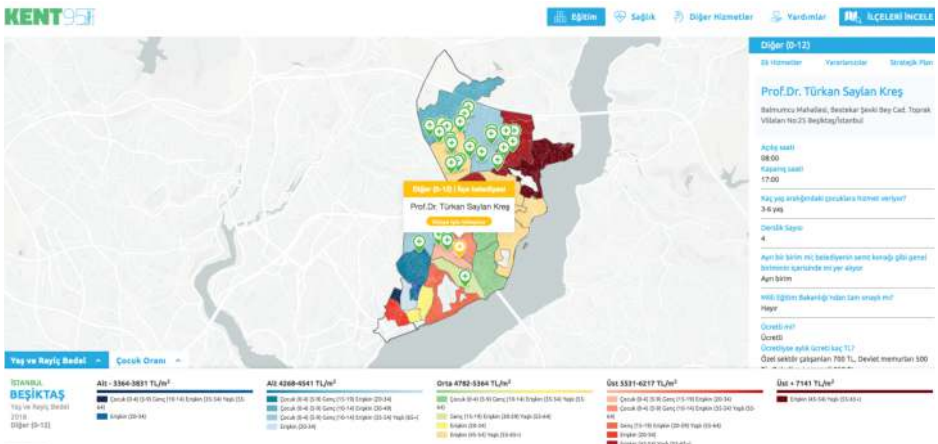
Under the Assistance tab, one can find the maps showing the distribution of the types of assistance provided by the metropolitan municipality and the district municipality among the neighborhoods. By clicking on the neighborhoods in the Assistance tab, information can be accessed about the amount of assistance, to how many households/people it is provided, and in which group in the age/market value maps of the neighborhood it is included.

3.3. The Impact of the Project

The interactive platform enables decision makers to follow municipal services and other public and private services currently provided in the provinces and districts, and to develop strategies for their future services. The Urban95 platform facilitates the monitoring of the educational and health services oriented toward children and thus enables decision makers to create policies based on data. The Urban95 platform has received a great deal of attention from the media and the public at large.

Decision makers can develop better strategies by examining on the income and age maps, what preschool education and health services metropolitan and the district municipalities offer to children and parents. Considered from the city residents' perspective, it should be emphasized that the website will enable access to detailed information about services and assistances being offered by various institutions, primarily the municipalities. City residents will be able to access information on which services and aid schemes are provided where they live, whether the services carry a fee or not, the amount of the fees where applicable, opening and closing hours, quality of service, and criteria for eligibility for the services and aid schemes, on a single site.

4th SECTION
THE INTERFACE DEVELOPED FOR ENTERING DATA TO URBAN95

Like every project realized by the collaboration of partners from various fields (municipalities, NGOs, universities), it must be conceded that the Urban95 project faces some difficulties in terms of its sustainability. On the other hand, it is highly encouraging that participating municipalities are giving positive feedback because they see how much easier the outputs of the project make their activities and how helpful they are in increasing the quality of the services they provide.

The fact that local governments recognized the value of the project during their participation to the survey and project activities and that they stated that they benefitted from the results when project outputs were delivered, underlines the importance of local administrations assuming the responsibility of sustaining this project by updating it from year to year. With this in mind, a user-friendly admin panel was designed for local governments to be able to instantly and easily update their service and social assistance data. This admin panel has been created at the end of a process of feedback and recommendations by various district municipality representatives in order to ensure that its development will take place in accordance with the demands and desires of the persons who will be its real users.

The aim for the Urban95 interactive platform, which has been developed through an effort of multiple partners, is that it will be kept up-to-date by means of the admin panel with the support and the will of stakeholders and local administrations who are the main beneficiaries of the project.

4.1. The Administrative Panel - A General Overview

The interface is reached by using the https://panel.kent95.org url. Users enter with the e-mail address and password created for them. New users request membership by clicking on the New User button located on the lower left corner of the enter button and entering their names, their email and institution information. A verification email is sent to the e-mail address they provide. Once the user verifies the email account, the website administrators receive an alert. After the website administrator's approval, the information that membership has been established is sent to the user's email address. After receiving this email, the user can input data to the website.

After login, the admin panel launches. The buttons on the top row of the panel direct the user to the data of the maps under the same title in the website. The Data button reveals the categories that can be reached by the General button and the categories ofthe age and market value, child population rate and educational attainment maps of all the neighborhoods. Education, Health, Other and Help buttons lead to the data under the corresponding titles in the website in both the Districts and the General sections. Using these buttons, existing data can be displayed or changed, and new data can be entered.

4.2. Data Visualization and New Data Entry

The Education button reveals the lists of daycare centers and nursing homes classified according to different age groups reachable under the same titles on the website. In the list, the button for the educational institution for which data is to be entered or changed is clicked. For example, for a daycare center serving the Other (age 0-12) group, the button with the same name needs to be clicked. Clicking on this button reveals three options.

The Examine general data option displays the data on the daycare centers serving the children in the 0-12 age group which are included in the General map on the site. When this button is clicked, the daycare centers are listed along with their features.

The See other (0-12) data option contains the daycare data accessible through the Examine districts button for particular districts on the website. To remove any of the listed daycare centers, the trash icon at the beginning of the row is used. To change any data about the daycare center, the pencil icon which is also at the beginning of the row is clicked. To duplicate the existing data plus icon is clicked. These icons are present on every row of data on the admin panel.

When the Pencil icon is clicked, the page containing all the data on the daycare center listed on that row launches. By using this page, data such as location, address, the age group of the children being served, and scholarship opportunities can be changed or entered if not present. To record the changes, the record button, if recording is not desired, the cancel button, and to remove the daycare center from the list, the delete button is clicked.

İl	İSTANBUL
Kime ait	İlçe belediyesi
ID	1663
İsim	ŞİŞLİ
0-8 yaş arası çocuklara veya ebeveyne yönelik hizmet birimleri için verdiğiniz dolaylı bir hizmet var mı?	Evet
0-8 yaş arası çocuklara veya ebeveyne yönelik hizmet birimleri için verilen dolaylı hizmetler nelerdir?	MEB Okulları içindeki okul öncesi sınıflar için bakım-onarım hizmeti.
Hizmete yönelik daha önce yapılmış bir etki analizi var mı?	DTR ile (Psikolog, SHU ve Sosyologlar aracılığıyla rapor tutuluyor.)
Önümüzdeki 2 yılda bu hizmetle ilgili neleri sunmayı düşünüyorsunuz?	Kreş açmak.
Hizmetin sağlandığına ve geliştirildiğine dair ölçütleriniz nelerdir?	Hedef her mahalleye kreş açmak.
Bu hizmet konusunda performans değerlendirme mekanizmanız var mı?	Yok

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When the Create other (0-12) data button is clicked, the page including the daycare center features launches, just as it happens on the data sorting screen. Into this empty page, first the information about the province, district, and location of the daycare center and its ownership is entered. For the information about the province, district, and ownership, the options displayed on the website are used. District municipalities can enter data only about the services provided within their district borders. Metropolitan municipalities can enter data about the services provided within the borders of the entire province. Location data can be recorded by entering coordinates or using a map. Data such as name, address, and opening/closing hours is then entered. All the available information about the daycare center should be entered on this page, even if all the fields cannot be filled. The operation is completed by clicking on the record button after all the data is entered.

All the operations that have been described by using the example of education data can be performed for Health, Other, and Help data as well. However, the questions posed for data entry will be different for different kinds of data. For example, for Health / Hospital data, instead of questions about the number of children served, hospital-specific questions about the bed capacity or the number of specialists will appear.

Entered data can be downloaded in excel format by using Export Data option under ≡ button. While district municipalities can download data on their districts, metropolitan municipalities can download all data on their provinces.
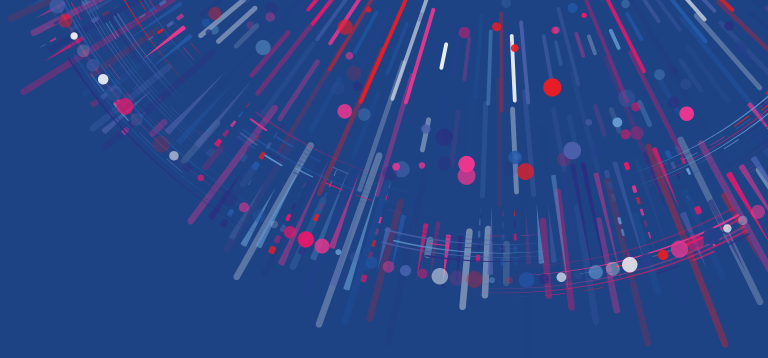
5th SECTION
URBAN95: SUSTAINING
THE DATA-DRIVEN POLICY TOOL

Information existing across different institutions in a dispersed fashion does not possess the quality of data that can support urban policy unless combined. The Urban95 project brings together this information in a creative and meaningful manner and is therefore the kind of tool that is often needed in the field of policies geared towards children and parents. Rendering this platform which has up to now been met with great interest and which has had a high impact on public policy sustainable is crucial for public and civil society institutions that aim to develop data-driven policy. Towards this end, TESEV will continue diversifying the harita.kent95.org website with new underlay maps made by analyzing different variables, adding urban dashboard features to the website and training municipal personnel in data management and data entry through the administrative

DATA-DRIVEN DECISION MAKING
AND POLICY DEVELOPMENT

TESEV

Bernard
van Leer
FOUNDATION