



State Comptroller of Israel | Local Government Audit | 2022

Follow-up Audit

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# **Regulation of Electric Bicycles and Two- Wheeled Vehicles Use in the Urban Space – Follow-Up Audit**





## Regulation of Electric Bicycles and Two-Wheeled Vehicles Use in the Urban Space – Follow-Up Audit

### Background

Bicycles and electric two-wheeled vehicles are alternative means of private car transportation. Using these vehicles has many benefits, including relieving traffic congestion, shortening travel times, and reducing air pollution. However, with the increased use of these vehicles, and regulation gaps in supervision and enforcement, dedicated infrastructure, and education, there is also an injury risk increase, to riders, pedestrians and other users of the public space.

### Key figures

**3,089**

injured persons in 2018–2020 in electric bicycles, electric scooters and scooters accidents, 2,846 of them are the riders

**55**

fatalities in 2018–2020 of electric bicycles, electric scooters and scooters riders

**over 400,000**

electric bicycles have been imported to Israel from April 2010 to October 2020

**about 38,000**

traffic tickets issued for riding electric bicycles, electric scooters and scooters without a helmet by the Police in 2020, about two-thirds of the total number which is 58,000

**80**

traffic tickets issued by the Police in 2020 to electric vehicle riders who made structural alterations therein, 0.1% of the total tickets, 58,000

**about 40%**

from 2015 to August 2021, the local authorities realized the budget, about NIS 151 million, allocated by the Ministry of Transport for bicycle paths construction

**about 8 km**

of bicycle paths were constructed as part of the 'Ofnidan Project', out of about 150 km planned in the project. About NIS 128 million out of the total budget of NIS 700 million

**About 7%**

of 10<sup>th</sup> graders in the Ultra-Orthodox sector study traffic education, compared to 77.3%, the general average among all pupils



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## Audit actions



From June to November 2021, the State Comptroller's Office conducted a follow-up audit of the rectification of the primary deficiencies raised in the previous audit regarding the central government and local government use and supervision regulation of electric bicycles and two-wheeled vehicles. In addition, the State Comptroller's Office audited issues not included in the previous audit report and expanded on some of the issues mentioned in the previous audit report. The audit was conducted at the Ministry of Transport and Road Safety (Ministry of Transport), at the Ministry of Public Security (Ministry of Public Security), at the Israel Police, at the Police Traffic Division (PTD), at the Ministry of Economy and Industry (Ministry of Economy), at the National Road Safety Authority (NRSA), at the Ministry of Education and the Ramat Gan Municipality. Completion examinations were conducted at the Israeli Standards Institute, the Israel National Center for Trauma and Emergency Medicine Research at the Gertner Institute (National Center for Trauma Research), and the 15<sup>th</sup> Forum of Local Authorities in Israel.

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## Key findings



### **Data on casualties in accidents involving electric bicycles and two-wheeled vehicles held by the Police**

PTD data show that in 2012–2020, 73 riders of electric bicycles, electric scooters, and scooters were killed in accidents, of which 60 in 2017–2020. Moreover, there was an increase of about 55% in 2019–2020 in the number of children under the age of 16 who were injured in an accident (from 138 to 214) while riding electric bicycles, electric scooters, and scooters (in contravention of the prohibition on riding stipulated in the regulations regarding these ages). The previous audit noted that data held by the Police on casualties are lower than the data in the National Center for Trauma Research. The follow-up audit found that the deficiency had not been rectified – according to Police data, in 2018–2020, 1,438 riders were injured in electric bicycles, electric scooters, and scooters accidents, compared to 2,846 according to the National Center for Trauma Research. I.e., the difference rate between the data is about 98%. Thus, the Police continue to use casualty data that is lower than the actual data, which may affect policy setting in the fight against road accidents involving electric bicycles and two-wheeled vehicles. In addition, the Police does not have data on minor injuries caused by bicycle accidents nor investigates them.







### **The Police enforcing traffic offenses of electric two-wheeled vehicles**


– the previous audit noted that in 2013–2014 the Police exercised little enforcement on cyclists, riders of electric bicycles, electric scooters, and scooters and that it issued only 66 tickets. In 2015–2016, the number of tickets increased to 12,356. The follow-up audit found that the deficiency was largely rectified – in 2020, the Police issued about 58,000





tickets to riders of those vehicles. It should be noted, however, that most of the tickets were issued for riding without a helmet offense (38,000 out of 58,000), alongside only a few dozen tickets issued for riding through a red light and against traffic direction offenses.

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**Enforcing upgrades and structural alterations in two-wheeled vehicles** – there was an increase of about 74% (in 2020 – 57,744, in 2018 – 33,174) in the total tickets issued by the Police to riders of bicycles and two-wheeled vehicles in 2018–2020. However, in 2018–2020 the Police issued only 80, 53, and 31 tickets, respectively, for upgrades and structural alterations made out of the 58,000 tickets it issued to riders on vehicles. In addition, the Ministry of Transport did not enforce structural alterations under its authority by Traffic Regulations defining the riders as “road users”.
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**Supervision and enforcement of electric bicycles import and market** – the previous audit noted that the Ministries of Economy and Transport were at odds regarding the ministry responsible for supervision and enforcement over importing and marketing electric bicycles. The follow-up audit found that the deficiency had been rectified they decided that the responsibility is of the Ministry of Transport. However, regarding the supervision and enforcement of shops with no trade license and in toy stores or chains, the deficiency has not been rectified – it was found that the Ministries of Economy and Transport did not supervise and enforce location of vehicles that did not meet the requirements. However, structural alterations in electric two-wheeled vehicles may be made even before they are sold to riders or in the store immediately after the sale.
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**Licensing and registration of electric bicycles and scooters** – the previous audit noted that the Ministry of Transport had changed its position several times about the need for licensing and registration of electric two-wheeled vehicles. The follow-up audit found that the deficiency has not been rectified – the Ministry of Transport has not yet formulated its policy on the subject. It should be noted that at the end of the follow-up audit, a senior deputy director of the Ministry of Transport informed the State Comptroller's Office that “these days [November 2021] the Ministry is formulating its policy on the subject, and is considering in principle requiring the registration of these vehicles”.
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**The powers of local government regarding the regulation and enforcement of users of electric bicycles and two-wheeled vehicles** – the council of Haifa, Hadera, Rehovot, Holon, and Herzliya municipalities did not approve the implementation of the law to streamline municipal supervision and enforcement and did not give traffic wardens enforcement powers, and in any event enforcement tickets were not issued by the traffic wardens. Be’er Sheva qualified 60 traffic wardens but did not issue tickets.



 **The 'Ofnidan Project'** – the previous audit noted that before the Ministry of Transport began promoting the project, it did not examine the willingness of local authorities to plan 'feed paths' and their preparation for it. The follow-up audit found that the deficiency had not been rectified – the Ministry of Transport did not examine with the local authorities in whose jurisdiction the Ofnidan Project is underway, their willingness and ability to establish feed paths for the Project and to finance the planning and construction costs of the trails or part thereof. It was also found that in September 2021, 8 km of trails of the 22 km under construction were completed (and of the 150 km planned), at the cost of about NIS 128 million out of NIS 700 million budgeted cumulatively for the Project.

 **Construction of bicycle paths by local authorities** – the previous audit noted that the Ministry of Transport does not have information on bicycle path infrastructure independently constructed by the local authorities and does not have information on paths under construction or in the planning process. The follow-up audit found that the deficiency had not been rectified – the Ministry of Transport does not keep information about paths constructed and paths planned or under construction by the local authorities, whether or not it co-financed them. It was also raised that the budget utilization rate by the local authorities from 2015 to August 2020 for the construction of bicycle paths was 39.8% (NIS 151 million out of NIS 379 million).

 **10<sup>th</sup>-grade traffic education in the Ultra-Orthodox sector** – 10<sup>th</sup>-grade students in all sectors should study the traffic education program. The national average of tenth-graders studying the subject is 77.3% of all tenth-graders, compared to the Ultra-Orthodox sector rate of tenth-grade classrooms studying the traffic education program, which is only 7% of all tenth-graders in the Ultra-Orthodox sector.








**Construction of bicycle paths by the Ramat Gan Municipality** – the previous audit noted that Ramat Gan Municipality had built 300 meters of bicycle paths. The follow-up audit found that the deficiency has been largely rectified – there is progress in the paving of bicycle paths by Ramat Gan Municipality, and as of October 2021, 4.5 km of trails have been constructed, and another ten trails with a total length of 7.8 km are being planned.

**The NRSA work plan on electric two-wheeled vehicles** – the previous audit noted that the NRSA does not have a work plan for electric two-wheeled vehicles. The follow-up audit found that the deficiency had been rectified – the NRSA had prepared such a plan for 2021.




## Key recommendations

-  It is recommended that the Police address the partial data in its possession so that the data will serve it in formulating its enforcement policy.
-  It is recommended that the Ministry of Transport formulate a professional and unambiguous diagnostic tool at the evidential level for examining alterations in electric two-wheeled vehicles. Moreover, given the danger to the public from these alterations, it is recommended that the Police increase enforcement against riders of electric two-wheeled vehicles that have altered their vehicles. In addition, it is recommended that the Ministry of Transport enforce riders who have made upgrades and alterations, according to the authority vested in it under the Transport Regulations.
-  It is recommended that the Ministries of Transport and Economy regulate between them the supervising and enforcing responsibility over shops with no trade license that sell electric two-wheeled vehicles and that the Ministry of Transport formulates its policy on licensing electric two-wheeled vehicles, as decided in Government Resolution 4188 and in the Ministerial Committee Resolution of November 2021.
-  It is recommended that the Ministry of Transport and the local authorities examine the construction of the bicycle paths, their activities, and plans for the construction of the Ofnidan feeding paths and locate the barriers that delay the implementation of the Project. In addition, it is recommended that the Ministry of Transport collect data on all bicycle paths within the local authorities.
-  It is recommended that the local authorities that have not yet done so, particularly the municipalities of Hadera, Rehovot, and Herzliya, consider applying the law to streamline enforcement procedures in their jurisdiction regarding the use of electric two-wheeled vehicles. It is recommended that Be'er Sheva Municipality, which has adopted a decision in the council to apply the law to streamline supervision and enforcement and has qualified traffic wardens to do so, begin enforcement actions throughout the city after completing the advocacy activities.



**The extent of Rectification of the main Deficiencies noted in the Previous Audit.**



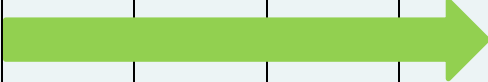
The Audit Chapter	The Audited Body	The Deficiency / Recommendation in the Previous Audit Report	The extent of Rectification of the Deficiency noted in the Follow-Up Audit			
			Not Rectified	Slightly Rectified	Considerably Rectified	Fully Rectified
Enforcement actions by the Israel Police of electric two-wheeled vehicles offenses	Israel Police	There is a significant gap between the National Center for Trauma Research data and the PTD data in the Police regarding the number of people injured in accidents involving two-wheeled electric vehicles. The data held by the Police are lower.				
Enforcement by the Israel Police of electric two-wheeled vehicles offenses	Israel Police	The previous audit noted that in 2013–2014 the Police exercised little enforcement on cyclists, riders of electric bicycles, electric scooters, and scooters and issued only 66 tickets. In 2015–2016, there was an increase in the number of tickets, and they amounted to 12,356.				





The Audit Chapter	The Audited Body	The Deficiency/ Recommendation in the Previous Audit Report	The extent of Rectification of the Deficiency noted in the Follow-Up Audit			
			Not Rectified	Slightly Rectified	Considerably Rectified	Fully Rectified
Supervision and enforcement of importing and marketing of electric bicycles	Ministries of Transport and Economy	The Ministries of Economy and Transport were at odds over the ministry responsible for supervising and enforcing the import and marketing of electric bicycles.				
Licensing and registration of electric bicycles and scooters	Ministry of Transport	The Ministry of Transport has changed its position several times regarding the need for licensing and registration of electric bicycles and scooters and has not set a clear policy.				
Development of bicycle paths	Ministry of Transport	The Ministry of Transport did not have information on bicycle path infrastructure established by the local authorities independently, nor regarding paths under construction or planning. Regarding the planning and construction of paths co-financed by the Ministry of Transport, it was found that the Ministry did not have complete information on their				



The Audit Chapter	The Audited Body	The Deficiency/ Recommendation in the Previous Audit Report	The extent of Rectification of the Deficiency noted in the Follow-Up Audit			
			Not Rectified	Slightly Rectified	Considerably Rectified	Fully Rectified
		construction status or about their connectivity within or outside the authority.  Regarding the Ofnidan Project, before the Ministry of Transport promoted the project, it did not examine the willingness of local authorities to plan feed paths and their preparedness for it.				
	Ramat Gan Municipality	Within the city, there was one bicycle path about 300 meters long.				
Education and information activities	NRSA	The NRSA did not establish a policy for the safety of cyclists and electric two-wheeled vehicles and did not discuss the formulation of such a policy for preparing work plans.				



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## Summary

Using bicycles and electric two-wheeled vehicles has many benefits, including relieving traffic congestion, shortening travel times, and reducing air pollution. However, with the increase in the use of these vehicles, there is also an increased risk of injury to riders, pedestrians, and other users of the public space. Thus, to enable efficient and safe use of these vehicles, a systematic regulation of the issue regarding the urban area is required.

The audit noted deficiencies regarding the use regulation of bicycles and electric two-wheeled vehicles in the government ministries, including the Ministry of Transport, the Ministry of Economy, and the Ministry of Public Security, as well as the Police. For example, the Police and the Ministry of Transport did not enforce structural alterations offenses to the said vehicles, which increased their speed up to 90 km/h (instead of the 25 km/h permitted by law), and since the previous audit until of the follow-up audit completion, disagreements between the Ministries of Transport and Economy over the body responsible for supervising shops without a trade license have not yet been settled.

Given the casualties number in accidents with the said vehicles and since the regulation directly affects the riders' and users' safety in the public space, along with the recognition that this regulation also affects the quality of life, such as green transportation and reduced traffic congestion – the relevant government ministries and the Israel Police should rectify the deficiencies indicated in the previous audit report and have not yet been rectified, and the additional deficiencies raised in the follow-up audit.

