# CUTTING JORDAN'S TRAFFIC DEATHS

HIKMAT ROAD SAFETY
A BOLD GIVING INITIATIVE

### Overview

In January 2008, Maher Kaddoura tragically lost his 17-year old son in a hit-and-run accident in Jordan. Back then, poor road conditions and driving behaviors were resulting in nearly 1,000 fatalities in Jordan each year. Kaddoura asked himself: What changes could save lives?

### ✓ Inside

- The opportunity for impact
- A bold investment
- How the initiative works
- Progress and results
- Key learnings for philanthropists
- About the philanthropist
- Appendix: References

### Project Inspired



### QUICK FACTS HIKMAT ROAD SAFETY

#### ✓ INTRODUCTION

The Hikmat Road Safety (HRS) initiative aims to reduce the high number of traffic-related injuries and fatalities in Jordan and bring about lasting change in the road safety system by creating awareness around the issue, developing road safety infrastructure, and changing behaviors of drivers and pedestrians.

**DETAILS** 

### **Primary philanthropist:**

Maher Kaddoura

### **Established:**

2008

### **Primary geography:**

Jordan

### **Primary focus:**

Road safety

### WHY BOLD?

HRS seeks to address an important gap in Jordan: road safety. It is now a prominent national program, using multiple approaches to work with at-risk populations (mainly youth) and creating long-term systems change.

### KEY LEARNINGS FOR PHILANTHROPISTS



### **Engage the community**

Involve your target audience, particularly youth, in designing and implementing programs



### Learn and evolve

Set long-term objectives, collect data to track progress, and adjust programs to meet changing needs



### **Partner with others**

Advocate and engage multiple stakeholders to achieve systems-level impact

### IN NUMBERS HIKMAT ROAD SAFFTY

Tracking data around investments and outcomes is central to HRS's efforts to continually reduce traffic fatalities in Jordan

### **FAST FACTS**

# USD 3.1 MILLION

▲ Invested to date (USD 1.4 million contributed by Kaddoura, and USD 1.7 million contributed by other private individuals and companies)

1,000

✓ In 2007, nearly 1,000 deaths occurred in Jordan due to road accidents

265

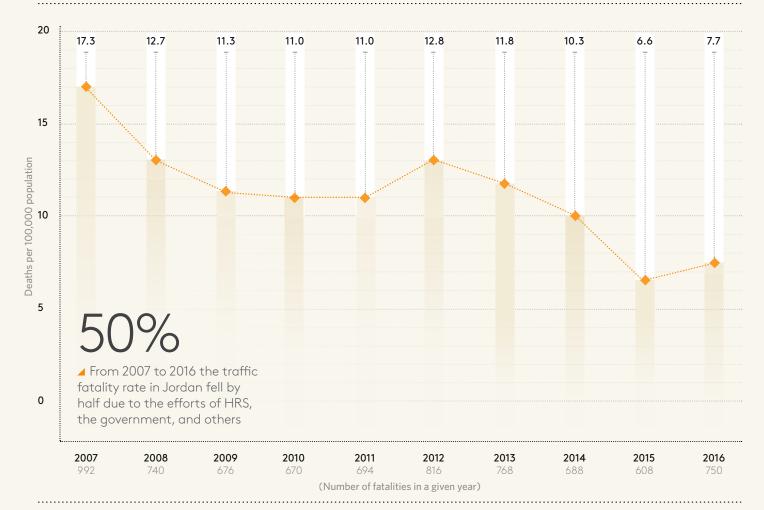
✓ Improvements across 265 most accident-prone school zones 1,200

▲ 1,200 playgrounds improved to create safer spaces for children

7,000

▲ Goal set in 2017 to reach 7,000 additional young drivers and children

### ROAD TRAFFIC FATALITIES AND FATALITY RATE OVER TIME IN JORDAN\*



# THE OPPORTUNITY FOR IMPACT

## 18,000

Number of injuries from road accidents in Jordan in 2007





### HIKMAT KADDOURA WAS WALKING DOWN A STREET IN AMMAN,

Jordan, when he was fatally injured in a traffic accident. The driver fled without consequence. In the days and months that followed, Hikmat's grieving father, Maher Kaddoura, a long-time management consultant, resolved to attack the root causes of Jordan's excessive traffic fatalities and injuries.

As Kaddoura learned, the tragedy that befell his son was all too common. Around the time of Hikmat's death, traffic fatalities and injuries had spiked in Jordan. In 2007 alone, nearly 1,000 families lost loved ones in fatal road accidents — a fatality rate significantly higher than many other countries in the region (see table below).¹ That same year, there were almost 18,000 injuries from road accidents, among the highest injury rates in the region.² Young adults between 21 and 30 suffered the highest proportion of fatalities and injuries in Jordan, a pattern that is common globally.³

Kaddoura realized that the public and private sectors weren't sufficiently prioritizing road safety, relative to other pressing national concerns, to overcome the challenges. He recalls thinking, "Road safety is not a priority in the country, like job creation, health, and other issues are. This is not high on the national agenda."

Kaddoura concluded that to significantly reduce accidents — and save others from Hikmat's fate — he would have to invest in a strategy with ambitious, long-term goals at a national level. ■



### A BOLD INVESTMENT IN IMPROVING ROAD SAFETY

"We consider ourselves a national program, yet focused on where we are bleeding and there is need for our solutions. We try to get maximum 'good' return on our investment."

Maher Kaddoura founder, HRS



### SEVEN YEARS BEFORE MAHER KADDOURA LOST HIS SON, HE FOUNDED

a not-for-profit company called Al-Jude for Scientific Care, which helps young people become economically self-sufficient. Al-Jude was Kaddoura's first effort in applying his private sector experience, networks, and resources to confront social and economic problems that afflict Jordan's youth.

"Most of our work is on bold, disruptive projects," says Kaddoura. "We don't do anything traditional. We apply management theory to what we do and we like to partner with others."

Soon after his son's death, Kaddoura launched the Hikmat Road Safety (HRS) initiative under the Al-Jude umbrella, with a mission to dramatically reduce Jordan's traffic-related injuries and fatalities, particularly among children and youth.

Kaddoura invested heavily in HRS, contributing USD 1.4 million to date, as well as his time, knowledge, and passion to support the initiative. By demonstrating simple, easy solutions to address road safety, he motivated other companies and private individuals to contribute an additional USD 1.7 million. Kaddoura also uses his management consulting expertise to guide HRS's strategy and operations, and his business and government networks, to help advance the initiative's impact.

From the outset, HRS was a bold effort, pursuing an issue that others had deprioritized relative to other national concerns. When Kaddoura founded HRS in 2008, it was one of the first initiatives focused on making roads safe at a national level. HRS's goal was to substantially reduce the total number of traffic fatalities and injuries across Jordan by addressing the root causes of traffic accidents.

HRS pursues multiple approaches to achieving that goal. One is direct service work. Here HRS aims for immediate impact, by designing programs that focus on those most in danger. As Kaddoura puts it, "We consider ourselves a national program, yet focus on where we are bleeding and there is a need for our solutions. We try to get the maximum 'good' return on our investment."

The team uses the Central Traffic Department's traffic accident statistics and other data to home in on high-risk locations and populations, such as schools and young adults. With this collected data, HRS initially focused on the most dangerous school zones. The team helped improve road safety infrastructure (installing speed bumps and safety signs, for example) in these heavily trafficked areas.

Other HRS efforts focus on building public awareness, to change driver and pedestrian behavior. Before HRS, the media rarely covered traffic accidents, and the public was largely unaware of their cumulative toll. HRS highlights the large number of road injuries and fatalities in Jordan, and puts a spotlight on improving road safety and reversing reckless driving.

Advocacy at the national level and stakeholder engagement is another anchor of the HRS approach. HRS brings road safety issues to the attention of the government, automobile clubs, private sector actors, and others, to push for change at the national level. It then collaborates with these stakeholders to take actions to create lasting change in the overall road safety system.

After less than a decade in operation, HRS's efforts have contributed to a 50 percent decline in Jordan's traffic fatality rate.<sup>4</sup>

### HOW THE INITIATIVE **WORKS**

### 62%

Percentage of accidents that occurred in just 265 of Jordan's 5,000 school zones





#### AFTER HRS'S RESEARCH IDENTIFIES HIGH-RISK LOCATIONS AND

populations, it springs into action. Over the last 10 years, its research detected notable gaps, such as:

- 1. Insufficient road safety infrastructure, especially around schools
- 2. Too few safe places for children to play
- **3.** A dearth of road safety education for drivers and pedestrians
- **4.** Limited law enforcement around pedestrian safety and safe driving (such as ensuring that drivers wear seat belts).

The organization has launched several key programs that address these gaps, working with a variety of stakeholders:

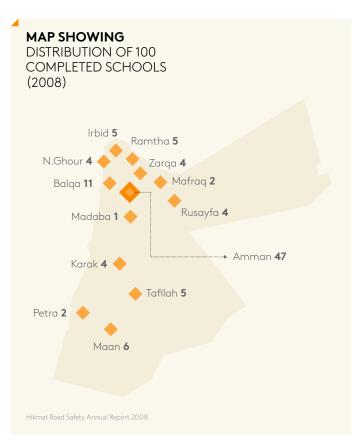
### 1. SCHOOL MAKEOVERS

When HRS began its work, there were roughly 3,800 traffic accidents annually in Jordan's 5,000 school zones. Upon close examination, the team observed that 62 percent of those accidents occurred in just 265 school zones.

Those school zones had a host of problems. They did not have barriers on the side of the road to protect children from oncoming traffic. Drivers weren't being alerted to this danger, as there weren't speed bumps or signage. HRS focused on these missing pieces, investing in the required infrastructure as well as launching a campaign on road-safety awareness in schools.

"We started with the 100 most dangerous school zones, based on data from the Central Traffic Department," explains HRS manager Arafat Abu Kalil. After improving safety conditions in the most dangerous 100, the work expanded to the rest of the 265 most accident-prone zones.

The influence of HRS extended even further. The team collaborated with other initiatives working on school infrastructure in other school zones across the country, raising awareness and providing guidance for their work. For example, HRS demonstrated types of improvements that could have a lasting impact on road safety, including barriers on the side of roads.



# HOW THE INITIATIVE WORKS (CONTINUED)

The HRS team first fixed **100 playgrounds** to establish the cost and benefit of creating safer spaces for children to play, and then expanded to **1,200 playgrounds** total with the support of others.

"I followed the [traffic] injuries to find more and more playgrounds to fix."

Maher Kaddoura, Founder, HRS



#### 2. PLAYGROUND ENHANCEMENTS

With significant progress in the high-risk school zones, the initiative turned its attention to another leading cause of injuries: children playing in the streets in urban neighborhoods due to inadequate playgrounds. To help shift behavior and encourage these children to play in safer areas, the team improved 100 playgrounds by adding football goal posts and line markings.

That 100-playground milestone, in turn, drove additional fundraising success with corporations and individual donors, ultimately allowing HRS to enhance a total of 1,200 playgrounds. HRS also tapped local public resources to support the playground improvements — for instance, using police trucks to transport the required infrastructure.

### 3. YOUTH AWARENESS AND SAFETY CAMPAIGNS

After making school zones and playgrounds safer, the HRS team focused on increasing road safety awareness, targeting the highest risk populations: school children and young adults.

Despite the progress that HRS's efforts helped propel, in 2016 people aged 18 to 35 still comprised 44 percent of Jordan's traffic injuries.<sup>5</sup> The team launched campaigns that focused on youth and enlisted them as volunteers. Campaign activities include:

- The "I am committed" campaign: Youth volunteers and Central Traffic
  Department officials stop cars at random and issue "artificial tickets"
  for poor driving behavior. (They also hand out commendations for
  driving safely.) The aim: spread the campaign's core message —"drive
  safely"— by word of mouth.
- Youth "cafes": On a monthly basis, young people discuss safety issues and share information, either in-person or through online platforms.
- The "Stop, Look, and Greet" campaign: Conducted in partnership with the Royal Automobile Club of Jordan, children aged 3 to 12 learn how to safely cross the street.
- Shams Band: Volunteers stage plays focusing on road safety in universities.
- Social media awareness: The HRS team and volunteers share stories
  of families that have lost loved ones in road accidents.
- Shock program: The HRS team films and shows videos of people breaking road rules, such as pedestrians crossing against a red light, to demonstrate consequences and discourage reckless behavior.

"The statistics around traffic accidents have been alarming," shares Mariam Al-Azzeh, director of the Road Safety Center of Excellence. "The Hikmat Road Safety team is doing a great job — especially their program for creating awareness around road safety for youth and children, which has been really impactful."

### 4. EDUCATION AND TRAINING

HRS partnered with the German Jordanian University to establish the Road Safety Center of Excellence. The objective: to provide road safety training, workshops, and awareness sessions for different stakeholders. For example, engineers learn new approaches to make vehicles safer, and drivers receive instruction on vehicle maintenance and safe driving practices. Today, the Road Safety Center is working with the Ministry of Transport and other government stakeholders to identify gaps in the laws and improve enforcement. The center is also working to integrate road safety into school curricula.

In addition to these programs, the HRS team collaborates with a variety of other stakeholders on related activities. For example, the government's Central Traffic Department assists with any significant infrastructure improvements, as well as with data collection and monitoring, especially around trends in traffic-related fatalities and injuries in Jordan. HRS also partners with the Royal Automobile Club of Jordan to provide safe-driving training and for safety campaigns.



### **PROGRESS**

### AND RESULTS

### **USD 200**

Per playground cost savings, for every playground after the first 100





#### MAKING PROGRESS

First and foremost, HRS saves lives. As mentioned earlier, from the initiative's launch to 2016, Jordan has seen a 50 percent reduction in its traffic fatality rate. While many other factors, such as government support, likely also contributed to the decline, HRS clearly helped catalyze the change. The public also began to take notice, and Kaddoura's efforts became well-known and well-regarded.

### Targeted solutions

HRS's work to target the 265 locations most prone to road accidents appears to have been effective.

"Since we fixed the most dangerous school zones, the overall accident rate has dropped significantly," says Kaddoura. "So the other school zones were in fact not as dangerous [as the 265 we targeted]."

What's more, enhancing road safety in Jordan's most dangerous school zones appears to have had a long-lasting impact. Almost a decade after completing its work in three of the school zones, HRS went back and examined recent data from those zones. "There have not been any accidents outside these schools," Abu Kalil reports.

### Cost efficient models

HRS's interventions also provide blueprints for cost efficient models that the government and other actors can use across the country.

Case in point: improving the first 100 playgrounds cost USD 500 each. When those efforts proved successful, the team employed tactics — such as making design improvements that reduce the quantity of building materials and seeking out less expensive manufacturing and transportation approaches — to reduce the cost of each subsequent playground by USD 200.

HRS raised funds for enhancing the additional playgrounds through sponsorships from companies and individual donors.

### · Community engagement

Beyond these numbers, the team at HRS witnessed changes in how the community engages on the topic of road safety. "One of our successes is that the community is even interested to start," shares Abu Kalil. Dozens of youth, never before concerned with this topic, now work as volunteers to implement HRS programs. Others engage on social media and share their opinions. Youth are even starting their own projects related to road safety and contacting HRS to partner and learn more.

### **NAVIGATING CHALLENGES**

The journey to such success has not been linear. Kaddoura and the HRS team have had to learn and adapt over time. Early efforts to bring the road safety issue to national attention by highlighting the heart-wrenching data of injuries and fatalities fell short of changing behavior. HRS had to focus its communications in a more positive light — for instance, by showing photographs of its school makeovers — to build credibility and gain support.

"I garnered more support when I showed a solution," says Kaddoura. "I did one school and showed the before and after." By sharing the work more widely, he helped build HRS's name and credibility to then create more impact.

Despite these efforts, the project suffered a setback after the Arab Spring, when the government and donors had to prioritize other urgent issues, such as job creation and education. More recently, the tide seems to be shifting again to a more favorable state.

### PROGRESS AND RESULTS (CONTINUED)

HRS is exploring new ways to reach young people The government has started to develop a national strategy to improve road safety, with input from the Road Safety Center of Excellence. These changes in the regulatory environment have taught the HRS team to remain flexible and nimble, and to adapt their approaches and programs as the context shifts.

HRS also learned that even with the government's support, significant progress will not occur unless the police strictly enforce the law. "My firm belief is that law enforcement is key to sustain safe road behaviors, supplemented with awareness activities and infrastructure improvements such as signage," says Kaddoura.

Al-Azzeh of the Road Safety Center of Excellence, agrees: "We have a rule that pedestrians should cross the street using crosswalks, but nobody enforces that rule and as a result, the streets still remain chaotic."

Improving law enforcement remains a challenge, however, requiring close coordination with different government agencies to develop processes for dedicated enforcement and to align incentives. While this takes time, the HRS team continues to share what it has learned, informing the national strategy around road safety.

### **MOVING FORWARD**

HRS seeks to enhance and expand its work around youth awareness and safety campaigns. In 2017, HRS set a goal to train 2,000 young drivers on crash prevention, and 5,000 children on crossing the street safely. The team is also exploring new ways to reach young people. One approach: launching a competition that encourages schools to integrate safety initiatives into their curricula. "There will be schools announced as champions if they conduct more activities," says Abu Kalil.

The initiative is also exploring a web-based application featuring road safety games, to improve driver and pedestrian awareness.



### **KEY LEARNINGS** FOR PHILANTHROPISTS

# HRS'S STAKEHOLDER ENGAGEMENT Local and national government School and university administrations Road Safety Center of Excellence, Royal Automobile Club, and local NGOs Individual, corporate, and institutional donors

### **Engage the community**

Involve your target audience, particularly youth, in designing and implementing programs



HRS aimed to make a lasting impact on young people. To build awareness, the team designed informal meetups and theater events on university campuses to attract students and retain their attention. More importantly, the team recruited young people from all backgrounds as volunteers to engage their peers and act as role models by demonstrating good behavior. "They are the victims, but they were not involved in the solutions," says Kaddoura. "I wanted to let them drive [the initiative] and feel ownership." By engaging and valuing youth in these ways, HRS made them feel truly invested in the solutions.

### Learn and evolve

Set long-term objectives, collect data to track progress, and adjust programs to meet changing needs



Kaddoura has set a long-term goal for HRS and directed the team to continually learn and adapt to achieve it. He believes strongly in the power of data and research to identify gaps in the road safety system, track progress, and guide investment. For example, at its outset, HRS used detailed statistics to concentrate its spending on the most dangerous school zones.

Over time, data and research has informed decisions to shift focus from improving school zones, to building playgrounds, and ultimately to running awareness campaigns and educating youth.

"We're not a one-year program, but a 10- to 15-year initiative," says Kaddoura. "The idea is to be agile...a lot of people in our part of the world become stiff and develop tunnel vision. We use data and research and change our priorities and methods along the way.

### **Partner with others**

Advocate and engage multiple stakeholders to achieve systems-level impact



HRS has worked with many stakeholders in the road safety system, including:

- · School administrators
- Road Safety Center of Excellence at the German Jordanian University
- The government's Central Traffic Department, Ministry of Transport, and Ministry of Education
- Greater Amman Municipality and municipalities outside of Amman
- University administrations
- Public service providers (such as the police and playground operators)
- Corporations
- Individual and institutional donors
- Other organizations working in this space, such as NGOs and the Royal Automobile Club.

By working with different stakeholders, HRS accesses each group's unique expertise, capabilities, and resources. For example, school administrators suggest improvements for their school zones. The Central Traffic Department's staff are deployed to promote road safety. Universities provide a forum for connecting young people. Local government provides access to schoolyards after hours, which can be used as playgrounds.

In this way, HRS builds a collaborative network for road safety, which it hopes will sustain long-lasting change. ■

# ABOUT THE PHILANTHROPIST: MAHER KADDOURA

### **OVERVIEW**

### **▲ MAHER KADDOURA'S CAREER IN**

management consulting spans 20 years. Until recently, he served as managing partner at Saudi Arabia-based consultancy Nextmove, which Huron Consulting acquired in 2009. Previously, he was a managing partner at Accenture, where he helped build its presence in the Middle East. Kaddoura has also worked with leading financial services institutions in the Middle East, including stock exchanges, central banks, and retail banks.

In addition to running the Hikmat Road Safety Initiative, Kaddoura's family foundation, Al-Jude, oversees an entrepreneurship program in schools and an award program for social innovation that airs on Jordan TV.

"Most of our work at Al-Jude is on bold, disruptive projects – we don't do anything traditional... We strive to create social innovation platforms for people to come together, to participate, and to partner with others, in order to create change."

- Maher Kaddoura

# **APPENDIX:** REFERENCES

<sup>1</sup> Global Status Report on Road Safety: Time for Action, World Health Organization, 2009, <a href="http://www.who.int/violence\_injury\_prevention/road\_safety\_status/2009/web\_version.pdf">http://www.who.int/violence\_injury\_prevention/road\_safety\_status/2009/web\_version.pdf</a>

<sup>2</sup> Ibid

- <sup>3</sup> Bashar Al-Omari, Khalid Ghuzlan, and Hala Hasan, "Traffic Accidents Trends and Characteristics in Jordan," International Journal of Civil & Environmental Engineering 13, No. 5, October 2013. The percentage of casualties in this age group was estimated to be approximately 30 percent
- <sup>4</sup> The population in 2007 was 5.9 million with a death toll of 992. In 2016, the population was 9.5 million with a death toll of 750; death toll based on Jordan Traffic Institute research provided by HRS team
- <sup>5</sup> Statistics from Jordan's Central Traffic Department
- \* For road traffic fatalities and rate through 2014 see Road Safety in Jordan, Jordan Ministry of Transport, 2016, <a href="https://www.unece.org/fileadmin/DAM/trans/doc/2016/wp1/ECE-TRANS-WP1-2016-Presentation-4e.pdf">https://www.unece.org/fileadmin/DAM/trans/doc/2016/wp1/ECE-TRANS-WP1-2016-Presentation-4e.pdf</a>. For road traffic fatalities for 2015 and 2016, see Traffic Accidents in Jordan Annual Report 2016, Public Security Directorate. For population in Jordan in 2016, see Multidimensional Poverty in Jordan, United Nations Economic and Social Commission for Western Asia, 2018, <a href="https://www.unescwa.org/sites/www.unescwa.org/files/publications/files/multidimensional\_poverty\_in\_jordan-ry.pdf">https://www.unescwa.org/files/publications/files/multidimensional\_poverty\_in\_jordan-ry.pdf</a>. For population in Jordan in 2016, see Population, Jordan's Department of Statistics, <a href="https://dosweb.dos.gov.jo/population/population-2/">https://dosweb.dos.gov.jo/population/population-2/</a>

### IN PARTNERSHIP WITH

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