

U.S. Smart Highway Market by Component (Hardware, Software, Service, and Connectivity Technology), Deployment Model (On-Premise and Cloud), Technology (Intelligent Transportation Management System, Intelligent Management System, Communication System, Monitoring System, and Others): Country Opportunity Analysis and Industry Forecast, 2020–2027

https://marketpublishers.com/r/U4668EEB3731EN.html

Date: August 2020

Pages: 172

Price: US\$ 4,239.00 (Single User License)

ID: U4668EEB3731EN

## **Abstracts**

The U.S. smart highway market size was valued at \$6.90 billion in 2019, and is projected to reach \$18.52 billion by 2027, growing at a CAGR of 18.2% from 2019 to 2026. Smart road is referred to as a different way in which technologies are incorporated into roads for improving the connection between two or more autonomous vehicles running on the same track and to monitor the road more closely. Numerous benefits of smart roads include improving mass transit systems, reducing driving time, reducing accidents on the roads, and improving traveler safety and the desire for travel. The main purpose of smart roads is to reduce the travelers' time and lower pollution level on the highways.

Increase in the number of vehicles on the road and surge in road traffic injuries drive the growth of the U.S. market. In addition, increase in international trade among the emerging countries across the globe fuels the smart highway market growth. However, high initial and maintenance cost and lack of appropriate technical knowledge among the end users hamper the growth of the market. Furthermore, rise in advance technologies in the transportation sector and emergence of smart vehicles are expected to provide lucrative opportunities for the growth of the market.



The intelligent transportation system segment is expected to garner significant share during the forecast period. Numerous benefits such as improving the traffic safety, reducing the infrastructure damage, controlling the traffic and gathering traffic data, provided by this system drive the growth of the smart highway market in this segment. However, the monitoring system sector is expected to grow at a highest rate during the forecast period, owing to rapid adoption of this system by various government across the globe for reducing the accidents on roads and helps in prevention of vehicle theft. Thus, driving the growth of the market in this segment.

By connectivity technology, the U.S. smart highway market was led by wireless personal area network (WPAN) segment in 2019 and is projected to maintain its dominance during the forecast period. However, the NB-IoT segment is expected to grow at a highest rate during the forecast period.

The report focuses on the growth prospects, restraints, and trends of the U.S. smart highway market analysis. The study provides Porter's five forces analysis to understand the impact of various factors such as bargaining power of suppliers, competitive intensity of competitors, threat of new entrants, threat of substitutes, and bargaining power of buyers in the U.S. smart highway market.

#### Segment review

The U.S. smart highway market is segmented on the basis of component, deployment model, technology, and region. In terms of component, it is bifurcated into hardware, software, services and connectivity technology. As per connectivity type, the market is further bifurcated into cellular IoT, LoRa, NB-IoT, Wi-Fi, SIGFOX, wireline, wireless personal area network (WPAN), and others. By deployment model, the software market is segmented into on-premise and cloud. As per technology, it is segmented into intelligent transportation management system, intelligent management system, communication system, monitoring system, and others.

#### Top impacting factors

Rise in the number of vehicles among emerging countries

There is an increase in the number of vehicles being sold every year. The unsatisfactory infrastructure for transportation in many countries is the primary factor for the rise in vehicle sales. Also, there is an increase in disposable income of the people with



globalization and urbanization. According to International Organization of Motor Vehicle Manufacturers, about 95 million of vehicles were sold in 2018 as that of 75 million were sold in 2010. However, this increase in the number of vehicles is causing heavy traffic, especially in urban areas. Consequently, there is a rise in demand for smart highways and roads that monitor traffic congestion on every road and diverts the traffic accordingly to have a faster and smoother travel.

#### Increase in road traffic injuries

According World Health Organization (WHO), 1.35 million people approximately die each year from road traffic crashes. And about 20 – 50 million people suffer non-fatal injuries, with many incurring a disability. As a result, there is an urgency to reduce the number of road traffic injuries and smart highways is considered as one of the best solutions to this problem. The various components of smart highways such as traffic management systems, smart lighting systems, and speed monitoring systems are developed to reduce road traffic injuries. Hence, increase in road traffic injuries fuels the growth of the smart highway market. The 2030 Agenda for Sustainable Development set by the United Nations has an ambitious target of halving the global number of road traffic injuries by 2020.

#### Key benefits for stakeholders

The study provides an in-depth analysis of the U.S. smart highway market share along with the current & future trends to elucidate the imminent investment pockets.

Information about key drivers, restrains, and opportunities and their impact analysis on the market size is provided in the report.

Porter's five forces analysis illustrates the potency of the buyers and suppliers operating in the industry.

An extensive analysis of the key segments of the industry helps to understand the U.S. smart highway market trends.

The quantitative analysis of the U.S. smart highway market from 2020 to 2027 is provided to determine the market potential.



# Key market segments By Component Solution Hardware Surveillance Camera Digital Signage **Networking Devices** Monitoring & Detection Systems Others Software Service Implementation & Integration Service Training & Support Service **Consulting Service** Connectivity Technology Cellular IoT 2G & 3G 4G+ LoRa

NB-IoT



Wi-Fi SIGFOX Wireline Wireless Personal Area Network (WPAN) Others By Deployment Model On-Premise Cloud By Technology Intelligent Transportation Management System Lane Departure Warning (LDW) System Automatic Number Plate Recognition (ANPR) Incident Detection System (IDS) Radio Frequency Identification (RFID) Intelligent Management System Electronic Toll Collection (ETC) System Global Navigation Satellite System (GNSS)/Global Positioning System (GPS)

Real-Time Traffic Management System



# Communication System

Radio Network

**Emergency Network** 

Data Network

Monitoring System

Traffic Measurement

Weather Management

Video Surveillance

Others



#### **Contents**

#### **CHAPTER 1:INTRODUCTION**

- 1.1.REPORT DESCRIPTION
- 1.2.KEY MARKET SEGMENTS
- 1.3.KEY BENEFITS
- 1.4.RESEARCH METHODOLOGY
  - 1.4.1.Primary research
  - 1.4.2.Secondary research
  - 1.4.3. Analyst tools and models

#### **CHAPTER 2:EXECUTIVE SUMMARY**

#### 2.1.CXO PERSPECTIVE

#### **CHAPTER 3:MARKET LANDSCAPE**

- 3.1.MARKET DEFINITION AND SCOPE
- 3.2.KEY FINDINGS
  - 3.2.1.Top investment pockets
  - 3.2.2.Top winning strategies
- 3.3.PORTER'S FIVE FORCES ANALYSIS
  - 3.3.1. Bargaining power of suppliers
  - 3.3.2. Threat of new entrants
  - 3.3.3.Threat of substitutes
  - 3.3.4.Competitive rivalry
  - 3.3.5. Bargaining power among buyers
- 3.4.MARKET SHARE ANALYSIS/TOP PLAYER POSITIONING 2019
- 3.5.MARKET DYNAMICS
  - 3.5.1.Drivers
  - 3.5.2.Restraints
  - 3.5.3. Opportunities
- 3.6.IMPACT ANALYSIS OF COVID-19

#### CHAPTER 4:U.S. SMART HIGHWAY MARKET, BY COMPONENT

- 4.1.Component
  - 4.1.1.Hardware



- 4.1.1.1.Surveillance Camera
- 4.1.1.2. Digital Signage
- 4.1.1.3. Networking Devices
- 4.1.1.4. Monitoring & Detection Systems
- 4.1.2.Software
- 4.1.3.Service
- 4.1.3.1.Implementation & Integration
- 4.1.3.2. Training & Support service
- 4.1.3.3. Consulting Service
- 4.1.4.Connectivity Technology
- 4.1.4.1.Cellular IoT
  - 4.1.4.1.1.2G & 3G
  - 4.1.4.1.2.4G+
- 4.1.4.2.LoRa
- 4.1.4.3.NB-IoT
- 4.1.4.4.Wi-Fi
- 4.1.4.5.SIGFOX
- 4.1.4.6. Wireline
- 4.1.4.7. Wireless Personal Area Network (WPAN)
- 4.1.4.8.Others

#### **CHAPTER 5:U.S. SMART HIGHWAY MARKET, BY TECHNOLOGY**

- 5.1.Technology
  - 5.1.1.Intelligent Transportation Management System (ITS)
    - 5.1.1.1.Lane Departure Warning (LDW) System
    - 5.1.1.2. Automatic Number Plate Recognition (ANPR)
    - 5.1.1.3.Incident Detection System (IDS)
    - 5.1.1.4. Radio Frequency Identification (RFID)
  - 5.1.2.Intelligent Traffic Management System
    - 5.1.2.1.Electronic Toll Collection (ETC) System
  - 5.1.2.2.Global Navigation Satellite System (GNSS)/Global Positioning System (GPS)
  - 5.1.2.3.Real-Time Traffic Management System
  - 5.1.3.Communication System
    - 5.1.3.1.Radio Network
    - 5.1.3.2. Emergency Network
    - 5.1.3.3.Data Network
  - 5.1.4. Monitoring System
    - 5.1.4.1.Traffic Measurement



- 5.1.4.2. Weather Management
- 5.1.4.3. Video Surveillance

## CHAPTER 6:U.S. SMART HIGHWAY MARKET, BY DEPLOYMENT MODEL

- 6.1.Deployment Model
  - 6.1.1.On-Premise
  - 6.1.2.Cloud



# **List Of Tables**

**LIST OF TABLES** 

%%



# **List Of Figures**

**LIST OF FIGURES** 

%%



#### I would like to order

Product name: U.S. Smart Highway Market by Component (Hardware, Software, Service, and

Connectivity Technology), Deployment Model (On-Premise and Cloud), Technology (Intelligent Transportation Management System, Intelligent Management System, Communication System, Monitoring System, and Others): Country Opportunity Analysis

and Industry Forecast, 2020-2027

Product link: <a href="https://marketpublishers.com/r/U4668EEB3731EN.html">https://marketpublishers.com/r/U4668EEB3731EN.html</a>

Price: US\$ 4,239.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

## **Payment**

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/U4668EEB3731EN.html">https://marketpublishers.com/r/U4668EEB3731EN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>



To place an order via fax simply print this form, fill in the information below and fax the completed form to  $+44\ 20\ 7900\ 3970$