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12 **UNITED STATES DISTRICT COURT**
 13 **CENTRAL DISTRICT OF CALIFORNIA**
 14

15 In re: KIA HYUNDAI VEHICLE
 16 THEFT MARKETING, SALES
 17 PRACTICES, AND PRODUCTS
 LIABILITY LITIGATION

Case No. 8:22-ML-3052-JVS(KESx)

The Honorable James V. Selna

SUPPLEMENTAL SUBMISSION
RE: SOFTWARE UPGRADE IN
SUPPORT OF CONSUMER CLASS
ACTION SETTLEMENT

21 This document relates to: 22 CONSUMER CLASS ACTION
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PRELIMINARY STATEMENT

This MDL comprises litigation prompted by thefts or attempted thefts of certain Hyundai and Kia vehicles as a result of an unprecedented social media phenomenon. In approximately 2020, a group of car thieves who came to be known as the “the Kia Boyz” began posting social media videos that taught—and encouraged—others to steal certain Hyundai and Kia vehicles. Dkt. 84 (Consolidated Consumer Class Action Complaint) at ¶1290. The theft method popularized by social media involved: (1) targeting Hyundai and Kia vehicles with traditional “insert-and-turn” steel key ignition systems, (2) bypassing any manufacturer-equipped burglar alarm by breaking a window and entering the vehicle through the broken window, (3) dismantling the steering column; (4) destructively removing the lock cylinder; and (5) activating the ignition switch (typically with a USB cable or pliers). *Id.* at ¶¶ 1291-95. Hyundai and Kia vehicle thefts perpetrated by this method were promoted on various social media platforms.

Although the affected Hyundai and Kia vehicles all complied with federal law and safety standards, the companies promptly responded in a number of ways to assist vehicle owners and lessees. HMA and KA initially aided customers by offering free steering wheel locks (direct to owners and through local law enforcement and dealers).

Beginning in July 2022, litigation expanded beyond *Marvin, et al. v. Kia America, Inc.*, filed in Wisconsin, resulting in this MDL proceeding. In July and August 2022, cases were filed in Missouri (*Bendorf v. Kia America, Inc., et al.*), Kansas (*Simmons, et al. v. Kia America, Inc., et al.*), Iowa (*Brady, et al. v. Kia America, Inc. et al.*), Illinois (*Loburgio, et al. v. Kia America, Inc. et al.*), Kentucky (*Day v. Kia America, Inc. et al.*), Ohio (*Fruhling, et al. v. Kia America, Inc., et al.*), California (*Yeghanian v. Kia America, Inc., et al.*), Nebraska (*Hall v. Kia America, Inc., et al.*), New York (*Moon v. Kia America, Inc., et al.*), Minnesota (*Zanmiller v. Kia America, Inc. et al.*), Colorado (*Jones v. Kia America, Inc., et al.*); Florida (*Pue, et al. v. Kia America, Inc., et al.*), Texas (*Bodie et al. v. Kia America, Inc. et al.*), and others. As

1 a result of the increase in litigation and to help customers experiencing thefts, Hyundai
2 and Kia began developing an anti-theft software upgrade to thwart the method of theft
3 popularized by social media.

4 The anti-theft software upgrade enhances the manufacturer-equipped burglar
5 alarms to expand the conditions under which ignition-kill technology will prevent the
6 vehicles from starting without the key. The anti-theft software upgrade was launched in
7 phases beginning January 2023 for Kia vehicles and February 2023 for Hyundai
8 vehicles. The anti-theft software upgrade is now available for all anti-theft software-
9 eligible vehicles. HMA and KA have also pursued the removal of the abundant social
10 media videos teaching others how to follow the method of theft popularized on social
11 media. In addition, in 2021, Hyundai and Kia made immobilizer technology standard
12 on most 2022 model year vehicles and all 2023 and later model year vehicles.

13 The proposed (and now revised) Consumer Class Settlement will provide further
14 relief to affected customers and resolve the consumer class litigation, through a variety
15 of benefits detailed in the concurrently filed motion for preliminary settlement
16 approval. Pursuant to this Court's Order (Dkt. 200), defendants provide this
17 supplement to the preliminary approval record to address the operation,
18 implementation, and efficacy of the anti-theft software upgrade designed to prevent the
19 method of theft popularized in social media channels.

20 As shown below, the anti-theft software upgrade underwent extensive pre-release
21 validation and its reliability and effectiveness has been confirmed by an outside expert.
22 The anti-theft software upgrade can be obtained for free, is quickly installed, and comes
23 with a lifetime warranty under the proposed settlement. The anti-theft software
24 upgrade offers valuable enhanced vehicle security to approximately seven million Class
25 Members and serves as one of many significant benefits offered under the
26 comprehensive proposed settlement of the Consumer Class Action. The anti-theft
27 software upgrade has already been installed on more than 1.6 million Hyundai and Kia
28 vehicles.

1 **I. DEFENDANTS’ VEHICLES COMPLY WITH FEDERAL LAW, AND**
2 **NHTSA HAS REJECTED PETITIONS TO DECLARE A SAFETY**
3 **DEFECT OR ORDER A RECALL**

4 Hyundai Motor America (“HMA”) and Kia America, Inc. (“KA”) are American
5 automobile distributors headquartered in California. Since 2011, 100% of Kia models
6 and over 98% of Hyundai models have received an “Overall Rating” of 4 out of 5 stars
7 (or higher) on the U.S. government’s safety ratings.¹ Dkt. 220-2 (NHTSA Laboratory
8 Test Procedure for Federal Motor Vehicle Safety Standard (“FMVSS”) 114 (July 28,
9 2010) (publicly available at
10 https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/tp-114-04_tag.pdf)).²

11 **A. Neither U.S. Federal Law Nor Regulations Require Immobilizers**

12 The National Highway Traffic and Safety Administration (“NHTSA”) is
13 exclusively vested with authority to regulate automobile safety and security nationally
14 under federal law. 49 U.S.C. § 105. Federal law, including the National Traffic and
15 Motor Vehicle Safety Act (the “Motor Vehicle Safety Act”), 49 U.S.C. § 301, and the

16
17 ¹ Much of this background information and the corresponding factual support is set
18 forth in Docket No. 222, Defendants’ Notice of and Motion to Dismiss Consolidated
19 Governmental Entities Complaint and Supporting Memorandum and the accompanying
20 Request for Judicial Notice (Dkt. 220). For administrative ease, defendants do not
21 resubmit those supporting documents with this filing.

22 ² Dkt. 220-2 contains undisputed and publicly available information displayed on
23 government websites and was published by the government. *See King v. Cnty. of Los*
24 *Angeles*, 885 F.3d 548, 555 (9th Cir. 2018) (Courts may take judicial notice of matters
25 of public record, which include “undisputed and publicly available information
26 displayed on government websites”); *Smith v. Los Angeles Unified Sch. Dist.*, 830 F.3d
27 843, 851 n.10 (9th Cir. 2016) (matters of public record also include “letters published
28 by the government . . . as well as record and reports of administrative bodies”). The
Court may therefore take judicial notice that Dkt. 220-2 is a NHTSA publication whose
contents reflect NHTSA’s official positions. *See Winzler v. Toyota Motor Sales U.S.A.,*
Inc., 681 F.3d 1208, 1212 (10th Cir. 2012) (taking judicial notice of NHTSA records);
In re ZF-TRW Airbag Control Units Prod. Liab. Litig., 601 F. Supp. 3d 625, 689 (C.D.
Cal. 2022), *opinion clarified sub nom. In re ZF-TRW Airbag Control Units Prod.*, 2022
WL 19425927 (C.D. Cal. Mar. 2, 2022) (taking judicial notice of NHTSA document).

1 Motor Vehicle Theft Law Enforcement Act (the “Theft Act”), 49 U.S.C. § 331, and
2 regulations promulgated thereunder by NHTSA, govern motor vehicle safety and anti-
3 theft performance standards. 49 U.S.C. § 105(c).

4 In 1968, NHTSA promulgated Federal Motor Vehicle Safety Standard
5 (“FMVSS”) 114, which imposes two anti-theft performance requirements intended to
6 “reduce the incidence of crashes resulting from theft” and “decrease the likelihood that
7 a vehicle is stolen.” 49 C.F.R. § 571.114, S1 & S2. To comply with FMVSS 114,
8 vehicles must have a starting system that, when the key is removed, prevents:
9 (1) “normal activation of the vehicle’s engine or motor”; and (2) steering, forward self-
10 mobility, or both. 49 C.F.R. § 571.114, S5.1.1;³ Expert Report of Jim Smith (“Smith
11 Report”) at 2. This standard does not require vehicles to be 100 percent impenetrable to
12 thieves. 49 C.F.R. § 571.114, S1 & S2.

13 Further, although the first patent for the electronic immobilizer was granted in
14 1919, neither FMVSS 114 nor any other U.S. federal law or regulation, mandated the
15 installation of immobilizers when FMVSS 114 was issued in 1968. When the modern
16 passive vehicle immobilizer was invented in 1993—a time when vehicle theft rates
17 *were four times higher than they are today*—NHTSA did not mandate its use. Nor did
18 NHTSA mandate the use of immobilizers in the late 1990s when regulators in other
19 countries, including Australia, Canada, and New Zealand, made them mandatory.

20 In the 50-plus years since the introduction of FMVSS 114 NHTSA made
21 numerous changes and modifications to the standard, but never required immobilizers
22 to be installed as standard equipment in vehicles sold in the U.S. *See, e.g.*, 81 Fed. Reg.

23
24 ³ For the “normal activation” prong, NHTSA directs the tester to start the engine with
25 the key removed; the vehicle passes if the engine will not start. Dkt. 220-2 at 16 (“With
26 the key removed from the starting system, attempt to start the vehicle engine or
27 motor.”). For the prong requiring prevention of steering or forward self-mobility
28 without a key, the tester determines whether the car can be steered without a key by
“rotating the wheel in both directions,” whether “forward self-mobility is prevented
whenever the key is removed from the starting system,” and, if self-mobility is
prevented, by what means (e.g., a transmission lock). *Id.*

1 66833, 66835 (Sept. 29, 2016) (NHTSA describing that the U.S., unlike Canada, does
2 *not* require immobilizers). Rather, NHTSA maintains that automobile manufacturers
3 should have a *choice* in the anti-theft technology they adopt. When FMVSS 114 was
4 enacted, the agency explicitly *rejected* requests to prescribe “specific theft protection
5 devices” because “it would be unwise to establish a standard in terms so restrictive as to
6 discourage technological innovation in the field of theft inhibition.” 33 Fed. Reg. 6471,
7 6472 (Apr. 27, 1968). As such, “the standard has been framed to permit as many
8 specific devices as possible to meet its requirements.” *Id.*

9 And NHTSA has continued to prioritize manufacturer choice in subsequent
10 amendments to FMVSS 114. *See, e.g.*, 71 Fed. Reg. 17752, 17753 (Apr. 7, 2006). In
11 fact, when NHTSA amended FMVSS 114 in April 2006 to “allow manufacturers
12 *greater flexibility* in designing their override devices and to allow manufacturers the
13 choice to use electronic theft prevention devices, such as immobilizers, instead of using
14 steering locks, *if they desire*”, the agency did not change the standard to *require*
15 immobilizers. 71 FR 17752, 17753 (Apr. 7, 2006) (emphasis added).

16 **B. Defendants’ Vehicles Comply With Federal Law And NHTSA Has**
17 **Found No Safety Defect Requiring A Recall**

18 Plaintiffs allege that defendants designed, manufactured, and distributed vehicles
19 without engine immobilizers, *up to twelve years ago*, and such vehicles were the
20 subject of the recent, unprecedented epidemic of vehicle thefts.

21 Moreover, on April 20, 2023, 18 State Attorneys General—including the
22 Attorneys General of several home states of cities that have sued HMA and KA—sent a
23 letter to NHTSA (the “State AGs’ Recall Request”) asking the agency to:

24 use its authority to institute a recall of unsafe Hyundai and Kia vehicles
25 manufactured between 2011 and 2022 whose easily-bypassed ignition
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1 switches and lack of engine immobilizers make them particularly
2 vulnerable to theft.⁴

3 While six State Attorneys General submitted an unsolicited letter to the Court
4 (Dkt. 186) and highlighted the State AGs' Recall Request, which all of them took part
5 in, none mentioned NHTSA's response. The omission is disappointing but
6 understandable: NHTSA unequivocally rejected the State AGs' Recall Request. In its
7 response of June 5, 2023 ("NHTSA Response"), NHTSA rejected the State Attorneys
8 General's contention that the lack of engine immobilizers in Defendants' vehicles
9 violates FMVSS:

10 At this time, NHTSA has not determined that this issue constitutes either
11 a safety defect or noncompliance requiring a recall under the National
12 Traffic and Motor Vehicle Safety Act, 49 U.S.C. Chapter 301. The
13 Federal Motor Vehicle Safety Standard identified in your letter, FMVSS
14 No. 114, does not require an engine immobilizer. *See* 49 C.F.R. §
15 571.114. Also, the test procedure specified in that standard does not
16 contemplate actions taken by criminal actors to break open or remove
17 part of the steering column and take out the ignition lock to start a
18 vehicle. *See id.* § 571.114, S6. Here, the safety risk arises from unsafe
19 use of a motor vehicle by an unauthorized person after taking significant
20 destructive actions to parts of the vehicle.⁵

21 ⁴ Dkt. 189 (Defendants' Response to Governmental Entities' Statement and Letter
22 From Six State Attorneys General Re: The Proposed Consumer Settlement Agreement)
23 at 8-16 (attaching State AGs' Recall Request, April 20, 2023, also publicly available at
24 [https://oag.ca.gov/system/files/attachments/press-docs/4-20-
23%20NHTSA%20Recall%20to%20Hyundai%20and%20Kia.pdf](https://oag.ca.gov/system/files/attachments/press-docs/4-20-23%20NHTSA%20Recall%20to%20Hyundai%20and%20Kia.pdf)).

25 ⁵ Indeed, federal law requires that NHTSA must notify a manufacturer
26 "immediately after making an initial decision" that a vehicle "contains a defect related
27 to motor vehicle safety or does not comply with" an FMVSS requirement, 49 U.S.C.
28 §3011(a), and NHTSA maintains a public-facing website to notify the public when
either NHTSA or a manufacturer has determined a vehicle has a safety-related defect
or does not comply with FMVSS. *See* Dkt. 220-5.

1 Dkt. 220-3 at 2 (NHTSA Response).⁶ NHTSA added that “[h]ere, the safety
2 risk arises from unsafe use of a motor vehicle by an unauthorized person after taking
3 significant destructive actions to parts of the vehicle.” *Id.*

4 **II. SOCIAL MEDIA AND INTERVENING THIRD-PARTY CRIMINALS**
5 **CAUSED AN UNPRECEDENTED INCREASE IN THEFTS**

6 **A. Before The Viral “Kia Boyz” Challenge, Defendants’ Vehicles**
7 **Were Stolen Less Than Those Of Other Manufacturers Or**
8 **Distributors**

9 Historically, defendants’ vehicles have not been the subject of significant theft.
10 Indeed, various charts included in the Consolidated Governmental Entity Complaint
11 (Dkt. 175) show that before Fall 2022, thefts of Hyundai and Kia vehicles made up a
12 tiny fraction of overall vehicle thefts relative to thefts of vehicles of other
13 manufacturers or distributors. For example, Buffalo’s chart (Dkt. 175 at 84), which
14 purports to reflect the combined percentage of Hyundai and Kia auto thefts in Buffalo
15 between January 2020 and January 2023, alleges that Hyundais and Kias (even
16 combined) made up a miniscule fraction of overall car thefts in Buffalo from 2020
17 through July 2022, and that thefts of Hyundai and Kia vehicles remained relatively flat
18 during that period.⁷

19 **B. The “Kia Boyz” Challenge**

20 Plaintiffs allege the theft epidemic underlying their claims began in Milwaukee
21 in late 2020, when the “Kia Boyz” started posting “‘how-to’ videos” on social media
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23 ⁶ For the reasons stated *supra* in note 2, the Court may take judicial notice of Dkt.
24 220-5, as it is a NHTSA communication whose contents reflect NHTSA’s official
25 positions.

26 ⁷ The same is true for Madison (*id.* at 43-44), Green Bay (*id.* at 46-47), Columbus
27 (*id.* at 48, 54-55), Cincinnati (*id.* at 61-63), St. Louis (*id.* at 80), New York City (*id.* at
28 92-93), and Tonawanda (*id.* at 97-98). *See also id.* at 35-36 (Milwaukee reflecting low
and flat Hyundai and Kia thefts prior to 2021, because “Kia Boyz” videos originated in
Milwaukee earlier than in other cities).

1 platforms—some of which did not even exist when many of the Hyundai and Kia
2 vehicles targeted were manufactured. *See generally* Dkt. 84. The social media videos
3 teach viewers to steal Hyundai or Kia vehicles by (1) targeting Hyundai and Kia
4 vehicles with a traditional “insert-and-turn” steel key ignition systems, (2) bypassing
5 any manufacturer-equipped burglar alarm by breaking in through a window and
6 entering the vehicle through the broken window, (3) dismantling the steering column;
7 (4) destructively removing the lock cylinder; and (5) turning the exposed ignition
8 switch (typically with a USB cable or pliers). Dkt. 84 at ¶¶ 1291-95; Smith Report at 4.
9 Many social media users not only learned how to steal the vehicles, but also responded
10 to the social media “challenge” by promoting this method of theft in their own social
11 media videos depicting thefts of Hyundai and Kia vehicles using that same recipe. “Kia
12 Boyz” now refers to anyone who steals Hyundai or Kia cars using that same method of
13 theft popularized on social media.

14 Plaintiffs allege this social media trend sparked a marked rise in the theft rates of
15 these vehicles in Milwaukee and other major U.S. cities. *See* Dkt. 84.

16 **C. Social Media Incited Unprecedented Rise In Thefts**

17 There is no indication that, *before* late 2020, the general public was aware of the
18 multi-step process required to steal defendants’ vehicles that the “Kia Boyz” promoted
19 through social media, or that defendants’ vehicles were stolen at higher rates relative to
20 other manufacturers.

21 Rather, the theft increase began in late 2020, when the “Kia Boyz,” started
22 posting “‘how-to’ videos” on social media platforms—including some platforms that
23 did not even exist when many of the Hyundai and Kia vehicles targeted were
24 manufactured—detailing the multi-step process to steal Hyundai and Kia vehicles. *See*
25 Dkt. 84 at ¶ 1290. These videos of criminal activity, which the social media platforms
26 permitted to be posted, provided step-by-step instructions demonstrating how to steal
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1 certain Hyundai and Kia vehicles.⁸ The videos then “challenge[] teens to steal a car off
2 the street” in a “coordinated effort.”⁹ The “Kia Boyz” “became notorious for posting
3 videos of youth engaging in reckless driving after stealing Kias and Hyundais.” Dkt.
4 175 at ¶ 84.

5 Even according to the Plaintiffs’ own allegations, the unprecedented increase in
6 Hyundai and Kia thefts arose out of this viral social media “challenge,” which began
7 almost a decade after some of these vehicles were manufactured and sold, and
8 publicized a little-known means of criminal theft. Dkt. 84 at ¶ 1354 (“the number of
9 reported Class Vehicle thefts would skyrocket in 2020 when” these “‘how-to’ videos”
10 “began to circulate on social media”).

11 **D. Hyundai And Kia’s Significant Voluntary Measures To Address**
12 **The Increased Thefts**

13 Hyundai and Kia have taken sizable, voluntary steps to mitigate the theft
14 epidemic.

15 First, defendants made immobilizers standard equipment on all new vehicles as
16 of late 2021, which means that most 2022 model-year vehicles and all 2023 model-year
17 vehicles will include immobilizers.¹⁰ Declaration of Nick Dempkowski (“Dempkowski
18 Decl.”) at ¶ 3; Declaration of Long Nguyen (“Nguyen Decl.”) at ¶ 3.

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21 ⁸ See, e.g., Dkt. 220-7 (Greg Rosalsky, *Someone stole my truck. I got a crash*
22 *course on the wild black market for stolen cars*, NPR (Aug. 23, 2022) (publicly
23 available at [https://www.npr.org/sections/money/2022/08/23/1118457271/someone-](https://www.npr.org/sections/money/2022/08/23/1118457271/someone-stole-my-truck-i-got-a-crash-course-on-the-wild-black-market-for-stolen-)
[stole-my-truck-i-got-a-crash-course-on-the-wild-black-market-for-stolen-](https://www.npr.org/sections/money/2022/08/23/1118457271/someone-stole-my-truck-i-got-a-crash-course-on-the-wild-black-market-for-stolen-))).

24 ⁹ Dkt. 220-8 (Chris DiLella & Andrea Day, *TikTok challenge spurs rise in thefts of*
25 *Kia, Hyundai cars*, CNBC (Sept. 9, 2022) (publicly available at
26 [https://www.cnbc.com/2022/09/08/tiktok-challenge-spurs-rise-in-thefts-of-kia-hyundai-](https://www.cnbc.com/2022/09/08/tiktok-challenge-spurs-rise-in-thefts-of-kia-hyundai-cars.html)
[cars.html](https://www.cnbc.com/2022/09/08/tiktok-challenge-spurs-rise-in-thefts-of-kia-hyundai-cars.html))).

27 ¹⁰ Dkt. 220-13 (Elliot Hughes, *Kia, Hyundai will make security features standard*
28 *on new vehicles and distribute free steering wheel locks after surge of thefts*,
Milwaukee J. Sentinel (July 19, 2021) (publicly available at

1 Second, HMA and KA distributed free steering wheel locks to affected
2 communities by either shipping them directly to customers and/or making them
3 available through local law enforcement and/or dealers. Dempkowski Decl. at ¶ 3;
4 Nguyen Decl. at ¶ 3. From November 2022 to February 2023, HMA and KA
5 “work[ed] with law enforcement agencies to provide more than 26,000 steering wheel
6 locks . . . to 77 law enforcement agencies in 12 states.” Dkt. 220-4 (*Hyundai and Kia*
7 *Launch Service Campaign to Prevent Theft of Millions of Vehicles Targeted by Social*
8 *Media Challenge*, NHTSA (Feb. 14, 2023) ([https://www.nhtsa.gov/press-](https://www.nhtsa.gov/press-releases/hyundai-kia-campaign-prevent-vehicle-theft)
9 [releases/hyundai-kia-campaign-prevent-vehicle-theft](https://www.nhtsa.gov/press-releases/hyundai-kia-campaign-prevent-vehicle-theft))).¹¹ In the words of the
10 Milwaukee Police Department, “[b]oth Hyundai and Kia have been very receptive and
11 *immediately* began working on a solution . . . MPD appreciates their responsiveness and
12 commitment to addressing the auto thefts plaguing our community.” Dkt. 220-13. As
13 of September 26, 2023, HMA and KA together have distributed more than 390,000
14 steering wheel locks. Dempkowski Decl. at ¶ 3; Nguyen Decl. at ¶ 3.

15 Third, defendants voluntarily developed an anti-theft software upgrade.
16 Dempkowski Decl. at ¶ 3; Nguyen Decl. at ¶ 3. “Hyundai and Kia have developed theft
17 deterrent software for millions of their vehicles that lack an immobilizer and will
18 provide it FREE of charge to vehicle owners. The software updates the theft alarm
19 software logic to extend the length of the alarm sound from 30 seconds to one minute
20 and requires the key to be in the ignition switch to turn the vehicle on.” Dkt. 220-4. By
21 May 2023, installations reached 6,000 per day.¹² As of September 21, 2023,

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23 [https://www.jsonline.com/story/news/crime/2021/07/19/kia-hyundai-handing-out-free-](https://www.jsonline.com/story/news/crime/2021/07/19/kia-hyundai-handing-out-free-steering-wheel-locks-through-end-year/7963950002/)
24 [steering-wheel-locks-through-end-year/7963950002/](https://www.jsonline.com/story/news/crime/2021/07/19/kia-hyundai-handing-out-free-steering-wheel-locks-through-end-year/7963950002/))).

25 ¹¹ For the reasons stated *supra* in note 2, the Court may take judicial notice of Dkt.
26 220-4, as it is a NHTSA communication whose contents reflect NHTSA’s official
27 positions.

28 ¹² Dkt. 220-15 (Tom Krisher, *Hyundai and Kia thefts keep rising despite security*
fix, AP News (May 9, 2023) (available at [https://apnews.com/article/hyundai-kia-](https://apnews.com/article/hyundai-kia-tiktok-theft-stolen-8e0a353d24be0e7bce36e34c5e4dac51)
[tiktok-theft-stolen-8e0a353d24be0e7bce36e34c5e4dac51](https://apnews.com/article/hyundai-kia-tiktok-theft-stolen-8e0a353d24be0e7bce36e34c5e4dac51))).

1 cumulative installations total 880,929 for Hyundai vehicles. Nguyen Decl. at ¶ 10. As
2 of September 26, 2023, cumulative installations total 755,710 for Kia vehicles.
3 Dempkowski Decl. at ¶ 10. As of September 22, 2023, HMA has incurred
4 reimbursement costs associated with the anti-theft software upgrade of at least
5 \$41,134,701.25. Nguyen Decl. at ¶ 15. And as of September 26, 2023, KA has
6 incurred reimbursement costs associated with the anti-theft software upgrade of at least
7 \$33,269,200.67. Dempkowski Decl. at ¶ 14.

8 Furthermore, HMA and KA have continued efforts to remove the inciting videos
9 from social media. Dempkowski Decl. at ¶ 3; Nguyen Decl. at ¶ 3. “But as new ones
10 surface . . . there have been additional waves of thefts.” Dkt. 220-15.

11 **III. THE ANTI-THEFT SOFTWARE UPGRADE AUGMENTS EXISTING**
12 **THEFT-DETERRENCE TECHNOLOGY**

13 The technology of engine immobilizers varies from one manufacturer to the next,
14 but in general terms an engine immobilizer prevents a vehicle’s engine from starting
15 unless the correct key or fob is present. An engine immobilizer is similar to an ignition
16 kill system, which prevents the vehicle’s engine from starting unless certain conditions
17 are satisfied. Smith Report at 2-6.

18 The Hyundai and Kia vehicles that are eligible for the anti-theft software upgrade
19 were equipped with a burglar alarm system that incorporates an ignition kill feature.
20 Dempkowski Decl. at ¶ 5; Nguyen Decl. at ¶ 5; Smith Report at 16. As originally
21 designed, the ignition kill feature would activate when the burglar alarm was triggered.
22 Dempkowski Decl. at ¶ 5; Nguyen Decl. at ¶ 5; Smith Report at 5. An alarm will
23 trigger when the vehicle has been properly locked and the burglar alarm is armed with
24 the key or fob and, for example a hood or trunk is subsequently opened without the key.
25 Dempkowski Decl. at ¶ 5; Nguyen Decl. at ¶ 5; Smith Report at 5. The anti-theft
26 software upgrade enhances the ignition kill system by requiring the use of an authorized
27 key or fob to first disarm the system in order to start the vehicle. Dempkowski Decl. at
28 ¶ 5; Nguyen Decl. at ¶ 5; Smith Report at 6. The burglar alarm will be triggered to

1 activate the ignition kill when an attempt is made to start the vehicle without first
2 disarming the alarm. Dempkowski Decl. at ¶ 5; Nguyen Decl. at ¶ 5; Smith Report at 6.
3 From a technical perspective, the anti-theft software upgrade is implemented by
4 modifying the Integrated Body Control Unit/Body Control Module (IBU/BCM)
5 software logic on eligible vehicles. Dempkowski Decl. at ¶ 5; Nguyen Decl. at ¶ 5.

6 The method of theft popularized by social media promotes entry by breaking a
7 window. Smith Report at 9, 16. The anti-theft software upgrade is designed to prevent
8 the vehicle from being started when subjected to window break-ins of the social-media
9 style challenge, as long as the vehicle owner locks their vehicle and arms the burglar
10 alarm. Dempkowski Decl. at ¶ 6; Nguyen Decl. at ¶ 6; Smith Report at 9, 16. By
11 design, the anti-theft software upgrade does not impair vehicle reliability or
12 performance; it simply expands the logic and parameters by which the existing alarm
13 system operates. Dempkowski Decl. at ¶ 6; Nguyen Decl. at ¶ 6.

14 Although the anti-theft software upgrade operates the same way across all
15 eligible Hyundai and Kia vehicles, many different iterations of the anti-theft software
16 had to be developed. Dempkowski Decl. at ¶ 7; Nguyen Decl. at ¶ 7. Due to
17 differences in the number and design of control modules, including among different
18 trim levels within the same vehicle model, the anti-theft software upgrades need to be
19 specifically designed to account for different model variations. Dempkowski Decl. at ¶
20 7; Nguyen Decl. at ¶ 7; Smith Report at 6. Multiple vehicle systems, including body
21 control modules, engine control modules, and ignition systems, interact in order to
22 accommodate this technology. Dempkowski Decl. at ¶ 7; Nguyen Decl. at ¶ 7.
23 Because of the need to develop many variations of the anti-theft software upgrade
24 across models and trims, the anti-theft software upgrade was rolled out at different
25 times for eligible vehicles. Dempkowski Decl. at ¶ 7; Nguyen Decl. at ¶ 7.

26 Before being released to vehicle owners and lessees, each tested version of the
27 anti-theft software upgrade for Hyundai and Kia vehicles underwent a rigorous
28 validation process that required passing many separate tests. Dempkowski Decl. at ¶ 8;

1 Nguyen Decl. at ¶ 8; Smith Report at 8. This validation testing required confirmation
2 that all alarm and ignition kill functions operated properly under numerous different
3 scenarios, which tested both the conditions under which the alarm and ignition kill
4 functions were supposed to activate as well as when they should not activate.
5 Dempkowski Decl. at ¶ 8; Nguyen Decl. at ¶ 8; Smith Report at 8. The testing
6 parameters were conveyed by Research and Development teams at HMC and KC that
7 worked directly with the suppliers who provided the enhanced anti-theft software logic.
8 Dempkowski Decl. at ¶ 8; Nguyen Decl. at ¶ 8. Included in those test scenarios were
9 various functionality tests to ensure the updated anti-theft software operated compatibly
10 with other vehicle functions such as vehicle lights, windshield wipers, defoggers,
11 various warning signals, etc. and a “sleep mode” test to ensure the Body Control
12 Module in which the anti-theft software upgrade operates remains stable when in a low-
13 power state (key off and all entry points such as doors, hood, trunk, tailgate closed).
14 Dempkowski Decl. at ¶ 8; Nguyen Decl. at ¶ 8; Smith Report at 8.

15 Each of the many versions of the anti-theft software upgrade underwent
16 validation testing. Dempkowski Decl. at ¶ 8; Nguyen Decl. at ¶ 8. The thoroughness
17 of this testing process combined with later field troubleshooting provided Hyundai and
18 Kia engineers a commercially appropriate level of confidence that overall the anti-theft
19 software upgrades perform as intended and operate compatibly and safely with all other
20 vehicle functions.¹³ Dempkowski Decl. at ¶ 8; Nguyen Decl. at ¶ 8; Smith Report at 8,
21 16.

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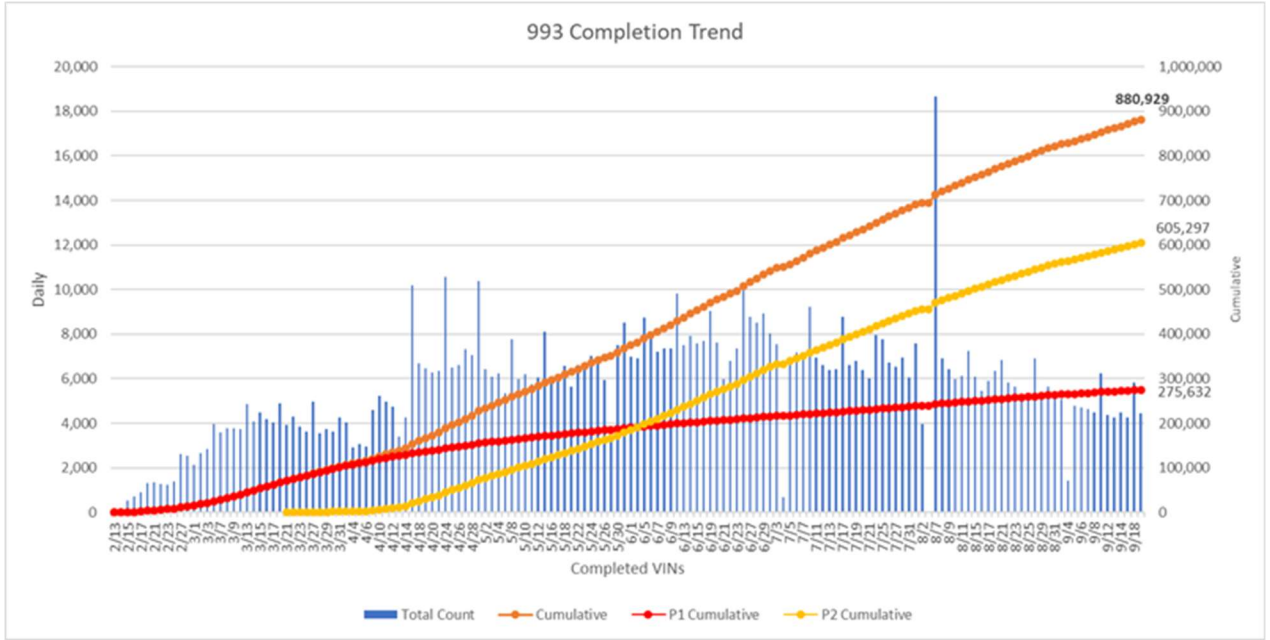
25
26 ¹³ To promote continued vehicle security, defendants will not publicly disclose the
27 precise protocols for testing and validating the software upgrade. Charts summarizing
28 these validations tests are provided in the Declaration of Cristina Henriquez at ¶¶ 2-6,
Ex. A. Defendants have produced the validation documents in confirmatory discovery.
Id. at ¶ 5.

1 **IV. THE COMPANIES’ SUCCESSFUL EFFORTS TO PROMOTE AND**
2 **IMPLEMENT THE ANTI-THEFT SOFTWARE UPGRADE**

3 HMA and KA began offering free installation of the anti-theft software upgrade
4 on a rolling basis beginning on February 14, 2023, and January 19, 2023, respectively.
5 Dempkowski Decl. at ¶ 4; Nguyen Decl. at ¶ 4. Hyundai owners and lessees were
6 notified by mail starting on February 20, 2023; some were also notified by email
7 starting on February 28, 2023. Nguyen Decl. at ¶ 4. Kia owners and lessees were
8 notified by mail (and some by email too) as early as January 2023. Dempkowski Decl.
9 at ¶ 4. These efforts precede approval or implementation of the proposed class
10 settlement. Collectively, dealers nationwide have been installing the anti-theft software
11 upgrade on an average of several thousand vehicles per day. Dempkowski Decl. at
12 ¶ 10; Nguyen Decl. at ¶ 10.

13 The below charts show anti-theft software upgrade installations on Hyundai
14 vehicles as of September 21, 2023. Nguyen Decl. at ¶ 10. The data indicates that
15 aggregate completions continue at steady rates. Adjusted completion rates reflect the
16 reality that many individual vehicles within a class that spans more than 12 years have
17 been scrapped, are unregistered, or are otherwise unlikely to return to road service and
18 therefore will never receive the upgrade. *Id.* at ¶ 11. These adjusted rates show anti-
19 theft software upgrade installations already near or above 50%, even *before* the
20 settlement has received preliminary approval.

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After adjusting for vehicles reported as being off the road (scrapped or unregistered), the installation rate for each eligible Hyundai vehicle exceeds 41%. Nguyen Decl. at ¶¶ 10-11.

Model	MY	Completed	Total	Completed %	Account For Total	Adj Comp %
Elantra	2017-2020	134,341	467,594	28.7%	88,865	47.7%
Sonata	2015-2019	123,237	457,356	26.9%	109,918	51.0%
Venue	2020-2021	18,054	31,735	56.9%	1,668	62.1%
Kona	2018-2022	37,062	78,645	47.1%	5,829	54.5%
Veloster	2012-2021	17,043	95,141	17.9%	23,147	42.2%
Accent	2018-2022	25,010	81,927	30.5%	10,725	43.6%
Elantra	2021-2022	8,376	19,886	42.1%	1,003	47.2%
Elantra Gt	2018-2020	5,446	17,342	31.4%	2,314	44.7%

Model	MY	Completed	Total	Completed %	Account For Total	Adj Comp %
Santa Fe	2013-2018	15,832	63,902	24.8%	8,821	38.6%
Santa Fe Sport	2013-2018	91,147	356,157	25.6%	55,397	41.1%
Santa Fe Xl	2019	1,289	3,128	41.2%	217	48.1%
Sonata	2011-2014	77,845	542,733	14.3%	168,123	45.3%
Tucson	2011-2022	159,161	514,540	30.9%	74,267	45.4%
Elantra	2011-2020	116,084	893,383	13.0%	256,006	41.6%
Elantra Gt	2013-2017	14,113	75,751	18.6%	17,944	42.3%
Genesis Coupe	2013-2014	1,160	13,032	8.9%	4,546	43.8%
Palisade	2020-2021	4,039	8,572	47.1%	377	51.5%
Santa Fe	2019-2022	31,690	83,782	37.8%	5,856	44.8%
Sonata	2015-2019	0	61	0.0%	45	73.8%
Grand Total		880,929	3,804,667	23.2%	835,068	45.1%

As of September 26, 2023, the adjusted total anti-theft software upgrade installation rate (accounting for vehicles that are scrapped, unregistered, or are otherwise unlikely to return to road service) also approaches 40% for all anti-theft software-eligible Kia vehicles. Dempkowski Decl. at ¶ 11.

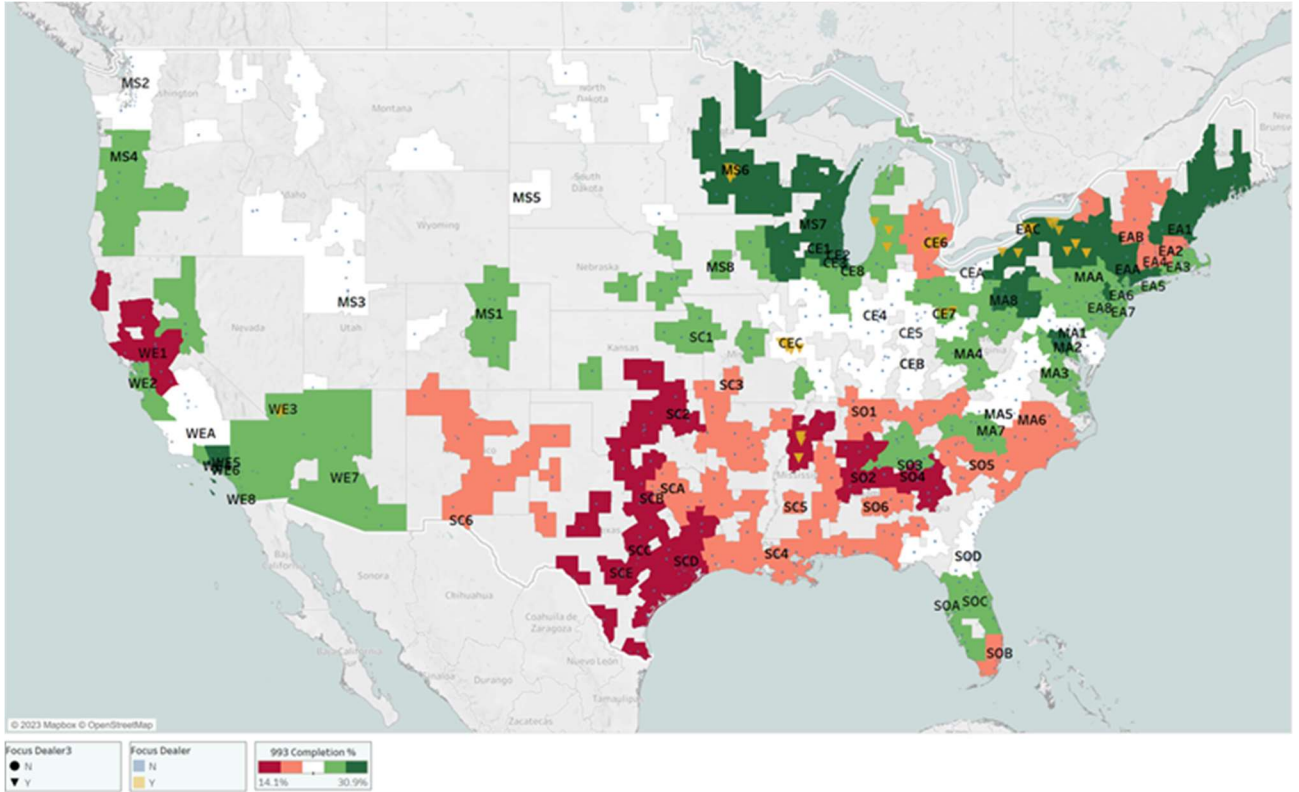
Model	MY	Completed	Total	Completed %
K5	2021-2022	3,126	6,368	49.1%
Sportage	2011-2016	45,052	192,501	23.4%
Sportage	2017-2022	136,885	328,375	41.7%
Optima (TF)	2011-2015	18,991	120,793	15.7%

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Model	MY	Completed	Total	Completed %
Optima (QF)	2011-2015	42,258	224,132	18.9%
Optima (Jfa)	2016-2020	70,310	279,523	25.2%
Optima (JF)	2016-2018	5,839	25,163	23.2%
Sorento	2011-2015	57,043	403,744	14.1%
Sorento	2016-2020	124,677	421,935	29.5%
Sorento	2021-2022	5,712	13,495	42.3%
Forte	2014-2016	28,069	207,046	13.6%
Forte	2017-2018	33,775	183,709	18.4%
Forte	2019-2021	62,915	232,260	27.1%
Soul	2020-2022	59,229	57,450	35.7%
Rio	2012-2017	7,333	91,839	8.0%
Rio	2018-2021	16,387	69,702	23.5%
Sedona	2020-2021	2,910	44,376	6.6%
Sedona	2015-2021	15,247	79,336	19.2%
Seltos	2021-2022	19,952	50,784	39.3%
Grand Total		755,710	3,140,851	24.1%

Id. at ¶ 10. Moreover, as one would expect, installation rates tend to be lower in areas with low theft rates, as reflected in the geographic chart below concerning Hyundai vehicles. *See* Nguyen Decl. at ¶ 12. Owners in these areas might deem the upgrade unnecessary, particularly given NHTSA’s position that immobilizers are not required.

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The companies continue to be proactive and innovative in their efforts to encourage installation of the anti-theft software upgrade, including working with local governments and police departments. For example, from July 27-31, 2023, HMA collaborated with Washington D.C. Mayor Muriel Bowser and acting Metropolitan Police Chief Pamela A. Smith to provide a mobile service center at RFK Stadium. Nguyen Decl. at ¶ 13. The mobile service center complemented HMA’s efforts to drive further installations of Hyundai’s free anti-theft software upgrade. *Id.* Specially trained mobile service technicians were available on-site and installed and completed the anti-theft software upgrade on more than 6,000 vehicles during the event. *Id.* Similarly, on August 12, 2023, KA collaborated with the Atlanta police department, Atlanta Mayor Andre Dickens, and Kia dealers in Atlanta to provide a mobile service center in Atlanta. Dempkowski Decl. at ¶ 12. Specially trained mobile service technicians were available on-site and installed and completed the anti-theft software upgrade on many vehicles and distributed numerous steering wheel locks. *Id.*

1 In addition, the proposed Settlement Agreement provides that the anti-theft
2 software upgrade will be implemented on eligible vehicles without request when Class
3 Members bring their vehicles to an authorized dealer even for unrelated services or
4 repairs. (Revised Settlement Agreement (“R.S.A.”), Section II.A.3).

5 To further promote notice and installation of the anti-theft software upgrade, the
6 proposed Settlement Agreement also requires the issuance of a nationwide press
7 campaign (including via social media platforms, such as TikTok and Instagram) and a
8 driver awareness and instructional campaign promoting the anti-theft software upgrade
9 and discussing its availability and effectiveness. *Id.* at Section II.A.6.

10 In light of their robust outreach activities with respect to the anti-theft software
11 upgrade, HMA and KA are forecasting a completion rate well above that of a typical
12 customer-noticed campaign. Dempkowski Decl. at ¶ 12; Nguyen Decl. at ¶ 13.

13 In addition, dealers performing the anti-theft software upgrade also affix two
14 stickers, one each on the driver and passenger windows, that indicate that the vehicle is
15 equipped with anti-theft logic. Dempkowski Decl. at ¶ 13; Nguyen Decl. at ¶ 14.
16 Based on anti-theft software upgrade completions as of September 21, 2023, HMA
17 estimates it has issued more than 1,761,858 decals. Nguyen Decl. at ¶ 14. Similarly,
18 based on anti-theft software upgrade completions as of September 26, 2023, KA
19 estimates it has issued more than 1,511,420 decals. Dempkowski Decl. at ¶ 13.

20 **V. NO MANUFACTURER OFFERS THEFT-PROOF VEHICLES**

21 In assessing the value and efficacy of the anti-theft software upgrade, it is
22 important to be cognizant that no vehicle is theft-proof, and neither immobilizer
23 technology nor ignition kill systems can prevent all thefts. Smith Report at 9, 16. Door
24 locks, ignition locks, ignition kill systems, burglar alarms, and parts marking are all
25 features intended to inhibit vehicle theft. *Id.* Despite such measures, all cars can be
26 stolen by first stealing or otherwise accessing the car’s key. *Id.* Cars are also often
27 stolen by use of a tow truck. *Id.* Immobilizer systems can be defeated by capturing and
28 duplicating the code from the key’s transponder or programming the vehicle to accept a

1 new transponder code. *Id.* Vehicle thefts made using these methods to defeat
2 immobilizer systems are well known by law enforcement agencies.

3 Just as vehicles with factory-equipped immobilizer technology are routinely
4 stolen in a variety of ways, breach scenarios exist that are more complex than breaking
5 a window (as in the social media method of theft) in response to which the anti-theft
6 software upgrade might not (and was not designed to) prevent a theft. Like all anti-
7 theft measures, the anti-theft software upgrade has known limitations. *Id.* It does not
8 serve the interests of Hyundai and Kia vehicle owners to detail such possible theft
9 methods. No evidence suggests such methods played any role in the uptick of thefts
10 that led to this litigation, or that such methods are being employed now on any
11 meaningful or promoted scale to evade the protections afforded by the anti-theft
12 software upgrade or that would make Hyundai and Kia vehicles relatively less secure
13 than other manufacturers' vehicles.

14 For example, the National Insurance Crime Bureau's ("NICB") recent national
15 theft data from 2022 shows that, among the top 10 stolen vehicle models is the Toyota
16 Camry, and the most stolen model year is 2021. *NICB Vehicle Theft Trend Data*,
17 National Insurance Crime Bureau (July 27, 2023), [https://www.nicb.org/news/news-
18 releases/new-report-shows-full-size-trucks-have-highest-theft-rate](https://www.nicb.org/news/news-releases/new-report-shows-full-size-trucks-have-highest-theft-rate). That Toyota model
19 year contains an immobilizer system,¹⁴ yet was stolen in aggregate numbers that do not
20 materially differ from the number of Hyundai and Kia models that were most stolen
21 during the same period, and at the height of the social media trend targeting those
22 Hyundai and Kia models. This data tends to show that incorporation of immobilizer or
23 similar ignition kill technology will not necessarily result in materially fewer thefts if
24 thieves favor and target a particular model.

25 ¹⁴ See 2021 Toyota Camry Owner's Manual at 79 (available at
26 [https://assets.sia.toyota.com/publications/en/om-
s/OM06242U/pdf/OM06242U.pdf?_gl=1*k2iapj*_tmna_ga*NDAXODgwMjQ1LjE2O
TMwODc0NjI.*_tmna_ga_EP43E5EFVZ*MTY5MzA4NzQ2MS4xLjEuMTY5MzA4
NzY3OC40MS4wLjA](https://assets.sia.toyota.com/publications/en/oms/OM06242U/pdf/OM06242U.pdf?_gl=1*k2iapj*_tmna_ga*NDAXODgwMjQ1LjE2O
27 TMwODc0NjI.*_tmna_ga_EP43E5EFVZ*MTY5MzA4NzQ2MS4xLjEuMTY5MzA4
28 NzY3OC40MS4wLjA)).

1 The state-by-state data in the NICB report further illustrates the relative
2 vulnerability of cars with immobilizers as compared to the vehicles at issue. For
3 example, although three cities within New York state have sued, the NICB data shows
4 7 of the 10 most stolen vehicles in New York in 2022 *had* immobilizers. Only one
5 Hyundai model and no Kia models are on that list. In a number of other states (which
6 range in demographics and location), *no* Hyundai or Kia model was in the top 10 most
7 stolen vehicles for 2022, yet the lists for these states are replete with vehicles that *do*
8 contain immobilizers—for example Arizona, Alabama, Alaska, Arkansas, Idaho,
9 Indiana, Iowa, Maine, Mississippi, Montana, New Hampshire, New Jersey, Oregon,
10 South Carolina, South Dakota, Texas, Utah, and Vermont. This data shows that
11 vehicles with immobilizers can be and are stolen at significant rates and suggests that
12 multiple factors impact which models are stolen most frequently.

13 **VI. INITIAL FIELD DATA CONFIRMS THE ANTI-THEFT SOFTWARE**
14 **UPGRADE WORKS AS INTENDED**

15 The anti-theft software upgrade was launched in early 2023. Dempkowski Decl.
16 at ¶ 10; Nguyen Decl. at ¶ 10. Currently more than 1.6 million Hyundai and Kia
17 vehicles have the anti-theft software upgrade installed. Dempkowski Decl. at ¶ 10;
18 Nguyen Decl. at ¶ 10. All available evidence suggests the anti-theft software upgrade
19 is working as intended to prevent thefts attempted by means of the method popularized
20 on social media.

21 **A. Independent Testing Confirms The Anti-theft Software Upgrade**
22 **Was Appropriately Validated and Performs As Intended**

23 In connection with this submission, HMA and KA retained James Smith, a
24 mechanical engineer and vehicles system expert at Exponent, to verify the efficacy of
25 the anti-theft software upgrade. Exponent’s test pool included (a) vehicles on which the
26 companies had validated the anti-theft software; (b) other Class Vehicles that had the
27 anti-theft software upgrade installed; and (c) vehicles reported as stolen. Exponent’s
28

1 methodologies and findings are detailed in Mr. Smith’s report, submitted concurrently.
2 *See* Smith Report. The significant determinations include the following:

- 3 • The process that Hyundai and Kia used to validate the anti-theft software,
4 which required passing many tests designed to confirm proper operation
5 of the ignition kill function and compatibility with other vehicle functions,
6 **provides reasonable confidence that the anti-theft software upgrade**
7 **performs as intended and operates compatibly with other vehicle**
8 **functions.**
- 9 • Installation of the anti-theft software upgrade was performed in less than
10 10 minutes and without difficulties.
- 11 • Functional testing by Exponent of the anti-theft software upgrade on 19
12 vehicles showed it was installed correctly and functioned as expected. **In**
13 **all 19 cases the vehicles could not be started using the social media**
14 **theft method.**

15 Smith Report at 7-8. In addition to assessing the pre-launch validation process
16 and testing the anti-theft software upgrade as installed on a cross-section of vehicles,
17 Exponent also evaluated four vehicles that had been reported stolen after having
18 received the anti-theft software upgrade. *Id.* at 9. The results of those investigations
19 are summarized below and did not alter Exponent’s conclusion that the anti-theft
20 software upgrade operated effectively to prevent the social media method of theft.

- 21 • On a 2017 Hyundai Tucson, Exponent confirmed that, even after the theft,
22 the anti-theft software upgrade operated properly to cause the alarm to
23 trigger (if armed) when the ignition switch was turned and thus prevent
24 the vehicle from starting. Exponent concluded that, rather than the theft
25 resulting from a failure of the anti-theft software, the evidence indicated
26 the doors were unlocked and the alarm was not armed at the time of the
27 theft. *Id.* at 9, 11.

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- 1 • Another of these vehicles was the 2017 Kia Sportage referenced in an
2 August 22, 2023 email to the Court by Kathryn Snyder. Exponent
3 concluded this vehicle did not exhibit signs of the social media method of
4 theft. Instead, for reasons detailed in the Smith report, the investigation
5 showed “[i]t is more likely this vehicle was either started with a key, or
6 not started at all and instead towed away.” *Id.* at 13-15.
- 7 • Finally, Exponent investigated two Kia Rios where the anti-theft software
8 did not operate as expected. Both vehicles were confirmed to be among a
9 small subset of Kia Rios that received the incorrect anti-theft software, an
10 implementation error that Kia has acknowledged and taken steps to
11 rectify. *Id.* at 11-13.

12 As further explained in Mr. Smith’s full report, his investigation of the anti-theft
13 software development, validation and performance on installed vehicles permitted him
14 to conclude to a “reasonable degree of engineering certainty” that the Hyundai/Kia anti-
15 theft software upgrade “is effective in preventing the social media challenge theft
16 method.” *Id.* at 16.

17 **B. The Companies’ Evaluation Of Reportedly Stolen Vehicles Shows**
18 **No Basis To Question Anti-theft Software Upgrade Efficacy**

19 For reasons previously explained, it is unfortunate but expected that some thefts
20 of vehicles equipped with the anti-theft software upgrade continue. Cars by all
21 manufacturers equipped with immobilizers and ignition kill systems are stolen
22 frequently and dominate the recent “most-stolen” lists of most states. *See* Section V.¹⁵
23 Continued thefts might be particularly likely to result when thieves target a particular

24
25 ¹⁵ For example, there are reports that immobilizer-equipped vehicle thefts rose in
26 the United Kingdom from 2021-2022. *See* David Mullen, *Keyless Cars Twice As*
27 *Likely To Be Stolen As Non-Keyless Models: Time To Dust Off The Steering Wheel*
28 *Lock?* (November 28, 2022) (publicly available at <https://www.driving.co.uk/news/keyless-cars-twice-as-likely-to-be-stolen-as-non-keyless-models/>).

1 brand or model, as undoubtedly resulted from the documented social media
2 phenomenon here that centered on certain Hyundai and Kia models. The anti-theft
3 software upgrade operates as a barrier to the method of theft popularized by social
4 media, but, like immobilizers generally, cannot be expected to prevent all thefts.

5 HMA and KA are endeavoring to investigate reported thefts that come to their
6 attention of vehicles with the anti-theft software upgrade to confirm the efficacy of the
7 upgrade in the field. Dempkowski Decl. at ¶ 15; Declaration of John Gramata
8 (“Gramata Decl.”) at ¶ 3. These investigations typically begin when a customer reports
9 to HMA or KA that his/her vehicle was the subject of a theft or attempted theft.

10 Dempkowski Decl. at ¶ 15; Gramata Decl. at ¶ 3. To the extent possible, the
11 investigations involve interviewing the customer, reviewing any documentation or
12 other materials relating to the incident, and inspecting the vehicle if made available to
13 HMA or KA. Dempkowski Decl. at ¶ 15; Gramata Decl. at ¶ 3. Some customers
14 submit photographs and/or make their vehicles available to HMA or KA. Dempkowski
15 Decl. at ¶ 15; Gramata Decl. at ¶ 3. HMA and KA also make reasonable independent
16 efforts to gather the available information about the purported thefts, such as police
17 reports. Dempkowski Decl. at ¶ 15; Gramata Decl. at ¶ 3. If the mode of theft is not
18 apparent from circumstances or interviews, and to the extent the vehicle is available to
19 HMA or KA, the vehicle is evaluated to confirm the anti-theft software upgrade is
20 operating as intended and activates the ignition kill feature as designed to prevent the
21 theft mode popularized on social media. Dempkowski Decl. at ¶ 16; Gramata Decl. at ¶

22 **4. As shown below these investigations have yet to reveal an instance where the**
23 **appropriate anti-theft software upgrade did not perform as designed to prevent**
24 **theft by the social media method.**¹⁶ See Dempkowski Decl. at ¶ 17; Gramata Decl. at
25 ¶ 5.

26 _____
27 ¹⁶ If there were an instance where the software failed, the Settlement Agreement
28 provides warranty protection for the software upgrade for the life of the vehicle.
(R.S.A., Section II.A.2). As expected during a rollout of this scale, minor issues have

1 The Companies' investigation of thefts of vehicles equipped with the anti-theft
2 software upgrade (including some reported in certain media cases cited by the
3 government entity plaintiffs (Dkt. 183 at 7)) has confirmed that, in many instances, the
4 theft was accomplished by other means. Investigations into many customer reports of
5 theft after purported installation of the anti-theft software upgrade remain ongoing or
6 were inconclusive (in part because the vehicle might not have been made available for
7 inspection). But several conclusions can be drawn from the available data:

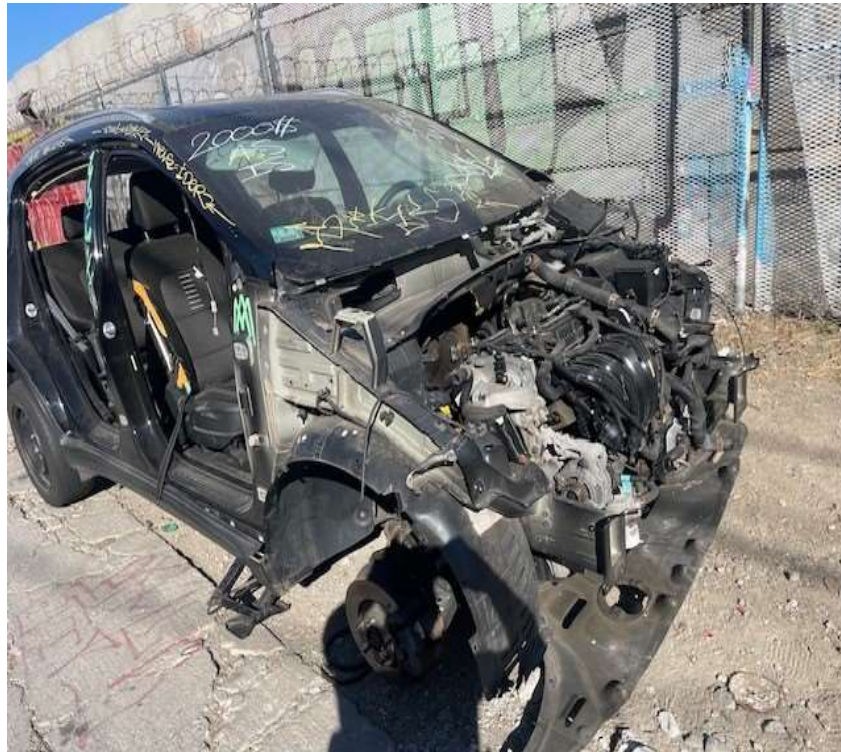
- 8 • These investigations have yet to confirm an instance where the vehicle-
9 appropriate, anti-theft software upgrade does not perform as designed.
- 10 • There were more than one hundred eighty-seven occasions where the theft
11 mode popularized by social media had been attempted but no theft
12 resulted, indicating that the anti-theft software upgrade worked precisely
13 as designed to prevent the theft.
- 14 • HMA and KA combined found at least ninety-nine thefts perpetrated by a
15 method other than the theft mode popularized by social media, which the
16 anti-theft software upgrade was not designed to prevent.
- 17 • In some instances, there was no indication of forced entry, thus the vehicle
18 was likely left unlocked—the anti-theft software upgrade requires that the
19 system be armed (vehicle locked) in order for it to activate.

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22 arisen during implementation. For example, there are some reported instances of minor
23 compatibility issues with vehicle remote start convenience features, some of which
24 have been resolved with new software deployment and the remaining of which are
25 currently being investigated. Dempkowski Decl. at ¶ 9; Nguyen Decl. at ¶ 9. This
26 issue did not affect operation of the software upgrade or any factory-equipped remote
27 start feature. Additional software addressed this issue and became available July 7,
28 2023 (Kia) and August 16, 2023 (Hyundai). Dempkowski Decl. at ¶¶ 9; Nguyen Decl.
at ¶ 9. Also, KA discovered a manual error with respect to the software version
installed on certain Rio models. Affected owners are being notified to obtain free
installation of the appropriate software version. Dempkowski Decl. at ¶ 9.

- 1 • These investigations also found more than twenty occasions where an
2 owner reported a vehicle stolen but either dealer records or records from
3 the company that runs the anti-theft software could not confirm that those
4 vehicles had ever received the anti-theft software upgrade.
- 5 • Several thefts were likely perpetrated by “chop shop” organizations that
6 appeared to have used a mode of theft different than the theft mode
7 popularized by social media.

8 Dempkowski Decl. at ¶ 17; Gramata Decl. at ¶ 5.

9 One example of the latter scenario—a vehicle apparently targeted for parts and
10 stolen in a different way—is reflected in the letter sent by class member Kathryn
11 Snyder to the Court on August 22, 2023¹⁷ and the photographs she provided below:



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25 ¹⁷ None of the other consumers who contacted the Court raised any issues related to
26 software upgrade performance. See April Johnson letter dated August 23, 2023
27 (attempted theft of 2015 Kia Optima); Ken Paulson e-mail dated August 27, 2023 (theft
28 of unidentified Hyundai vehicle not alleged to have received the software upgrade);
Anthony Pistillo letter dated August 30, 2023 (owned software-ineligible 2013 Hyundai
Elantra Coupe).

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Significantly, as shown in the photos, including those Ms. Snyder provided, the ignition lock might have been tampered with since the key slot is turned to the “ON” position and there is no key in the slot. As Mr. Smith observed, “[i]f the software upgrade was installed and the alarm was armed, and a tool, such as a flat blade screwdriver, was inserted into the key slot, the alarm would trigger, and the engine would not start.” Given these observations, Mr. Smith concluded, “this vehicle was likely not stolen using the social media theft method. It is more likely this vehicle was either started with a key, or not started at all and instead towed away.” Towing could be accomplished by accessing and pressing the shift lock release button to shift the transmission, and Mr. Smith saw evidence in the photos that this might have occurred. At that point, the “vehicle could then be towed away very readily.” As Mr. Smith determined, neither the anti-theft software upgrade nor the typical immobilizer technology used by other manufacturers would prevent a theft accomplished by towing or use of a key. *See Smith Report at 14.* It is also notable that this vehicle appears to have been extensively stripped, meaning it was targeted for parts value and not for joyrides or other purposes typically associated with the social media theft trend targeting Hyundai and Kia cars. Vehicles stolen for parts are frequently towed to secluded locations where they can be stripped.

C. Investigation Of Media Reports Give No Reason To Question The Anti-theft Software Upgrade Efficacy

Similar explanations apply to many if not all the instances of thefts reported in media reports of vehicles that purportedly had the anti-theft software upgrade installed. A sample of these results (including thefts reported in media cited by the Government Entities) is summarized below.

Report	Investigation results
2020 Kia Sportage of Guerrero-Pincheria reportedly stolen after receiving the anti-theft software upgrade (cited by Government Entity Plaintiffs, Dkt. 183 at 7 https://www.nbcwashington.com/investigations/some-kia-owners-question-anti-theft-software-fix-after-cars-were-stolen-following-upgrade/3390525/)	The vehicle has not been recovered and thus not inspected, but because no glass was left at the scene, this vehicle was likely subject to a different method of theft than that popularized on social media.
2019 Kia Sportage of Cook was reported as the subject of a window break-in <i>attempted</i> theft (cited by Government Entity Plaintiffs, Dkt. 183 at 7 https://www.nbcwashington.com/investigations/some-kia-owners-question-anti-theft-software-fix-after-cars-were-stolen-following-upgrade/3390525/)	Because a theft was attempted but could not be completed, it is reasonable to conclude the anti-theft software upgrade worked as designed.
2020 Kia Optima of Rose was reportedly stolen after a window break-in. Car was recovered with USB cord inside (cited by Government Entity Plaintiffs, Dkt. 183 at 7 https://www.nbcwashington.com/investigations/some-kia-owners-question-anti-theft-software-fix-after-cars-were-stolen-following-upgrade/3390525/)	The vehicle had no keys, so it could not be armed and disarmed at the time of the inspection to determine if the anti-theft software upgrade was operating. This investigation remains inconclusive.

See Dempkowski Decl. at ¶ 17.

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CONCLUSION

The anti-theft software upgrade operates as an effective, expedient, and unobtrusive deterrent for the type of theft that prompted this litigation. The Companies developed this technology at substantial expense and are offering it, fully warranted, as part of this Settlement even though such technology is not required by law and the true cause of any injury to consumers are criminal acts of non-parties. The anti-theft software upgrade provides significant protection that, along with other benefits in the proposed Settlement, offer a more than fair and reasonable resolution of the consumer claims and merit preliminary approval.

Dated: September 27, 2023

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