

AMENDED IN SENATE MARCH 31, 2016

AMENDED IN SENATE MARCH 28, 2016

**SENATE BILL**

**No. 1137**

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**Introduced by Senator Hertzberg  
(Principal coauthor: Senator Beall)**

**(Coauthors: Senators Anderson, Bates, Hill, Huff, Liu, and  
Wieckowski)**

(Coauthors: Assembly Members Brough, Chávez, Dodd, Lackey, Low,  
and Obernolte)

February 18, 2016

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An act to amend Section 502 of the Penal Code, relating to computer crimes.

LEGISLATIVE COUNSEL'S DIGEST

SB 1137, as amended, Hertzberg. Computer crimes: ransomware.

Existing law establishes various crimes relating to computer services and systems, including, but not limited to, knowingly introducing a computer contaminant, as defined. Existing law makes a violation of those crimes punishable by specified fines or terms of imprisonment, or by both those fines and imprisonment.

Existing law defines extortion as obtaining the property of another, with his or her consent, induced by a wrongful use of force or fear. Existing law makes extortion a crime, punishable by imprisonment in a county jail for 2, 3, or 4 years.

This bill would define ransomware as a computer *or data* contaminant *or lock placed in or introduced into a computer system, computer or data in a computer system, or computer* that restricts access to the ~~infected computer and demands that the user pay a ransom to remove the restriction.~~ *system, computer, or data in some way, and under*

*circumstances in which the person responsible for the ransomware demands payment of money or other consideration to remove the contaminant, unlock the computer system or computer, or repair the injury done to the computer system, computer, or data by the contaminant or lock. The bill would provide that a person is responsible for placing or introducing a contaminant or lock into a computer system, computer or data on a computer system, or computer if the person directly places or introduces the contaminant or lock, directs another to do so, or induces another person do so, with the intent of demanding payment or other consideration to remove the contaminant, unlock the computer system or computer, or repair the computer system, computer or data on the computer system, or computer. The bill would make it a crime for a person to knowingly introduce ransomware into any computer, computer system, or computer network. The bill would make a violation of this provision punishable by imprisonment in a county jail for 2, 3, or 4 years and a fine not exceeding \$10,000. The bill would specify that prosecution under that provision does not prohibit or limit prosecution under any other law.*

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: yes.

*The people of the State of California do enact as follows:*

1 SECTION 1. Section 502 of the Penal Code is amended to  
2 read:  
3 502. (a) It is the intent of the Legislature in enacting this  
4 section to expand the degree of protection afforded to individuals,  
5 businesses, and governmental agencies from tampering,  
6 interference, damage, and unauthorized access to lawfully created  
7 computer data and computer systems. The Legislature finds and  
8 declares that the proliferation of computer technology has resulted  
9 in a concomitant proliferation of computer crime and other forms  
10 of unauthorized access to computers, computer systems, and  
11 computer data.

1 The Legislature further finds and declares that protection of the  
2 integrity of all types and forms of lawfully created computers,  
3 computer systems, and computer data is vital to the protection of  
4 the privacy of individuals as well as to the well-being of financial  
5 institutions, business concerns, governmental agencies, and others  
6 within this state that lawfully utilize those computers, computer  
7 systems, and data.

8 (b) For the purposes of this section, the following terms have  
9 the following meanings:

10 (1) “Access” means to gain entry to, instruct, cause input to,  
11 cause output from, cause data processing with, or communicate  
12 with, the logical, arithmetical, or memory function resources of a  
13 computer, computer system, or computer network.

14 (2) “Computer network” means any system that provides  
15 communications between one or more computer systems and  
16 input/output devices, including, but not limited to, display  
17 terminals, remote systems, mobile devices, and printers connected  
18 by telecommunication facilities.

19 (3) “Computer program or software” means a set of instructions  
20 or statements, and related data, that when executed in actual or  
21 modified form, cause a computer, computer system, or computer  
22 network to perform specified functions.

23 (4) “Computer services” includes, but is not limited to, computer  
24 time, data processing, or storage functions, Internet services,  
25 electronic mail services, electronic message services, or other uses  
26 of a computer, computer system, or computer network.

27 (5) “Computer system” means a device or collection of devices,  
28 including support devices and excluding calculators that are not  
29 programmable and capable of being used in conjunction with  
30 external files, one or more of which contain computer programs,  
31 electronic instructions, input data, and output data, that performs  
32 functions, including, but not limited to, logic, arithmetic, data  
33 storage and retrieval, communication, and control.

34 (6) “Government computer system” means any computer system,  
35 or part thereof, that is owned, operated, or used by any federal,  
36 state, or local governmental entity.

37 (7) “Public safety infrastructure computer system” means any  
38 computer system, or part thereof, that is necessary for the health  
39 and safety of the public including computer systems owned,  
40 operated, or used by drinking water and wastewater treatment

1 facilities, hospitals, emergency service providers,  
2 telecommunication companies, and gas and electric utility  
3 companies.

4 (8) “Data” means a representation of information, knowledge,  
5 facts, concepts, computer software, or computer programs or  
6 instructions. Data may be in any form, in storage media, or as  
7 stored in the memory of the computer or in transit or presented on  
8 a display device.

9 (9) “Supporting documentation” includes, but is not limited to,  
10 all information, in any form, pertaining to the design, construction,  
11 classification, implementation, use, or modification of a computer,  
12 computer system, computer network, computer program, or  
13 computer software, which information is not generally available  
14 to the public and is necessary for the operation of a computer,  
15 computer system, computer network, computer program, or  
16 computer software.

17 (10) “Injury” means any alteration, deletion, damage, or  
18 destruction of a computer system, computer network, computer  
19 program, or data caused by the access, or the denial of access to  
20 legitimate users of a computer system, network, or program.

21 (11) “Victim expenditure” means any expenditure reasonably  
22 and necessarily incurred by the owner or lessee to verify that a  
23 computer system, computer network, computer program, or data  
24 was or was not altered, deleted, damaged, or destroyed by the  
25 access.

26 (12) “Computer contaminant” means any set of computer  
27 instructions that are designed to modify, damage, destroy, record,  
28 or transmit information within a computer, computer system, or  
29 computer network without the intent or permission of the owner  
30 of the information. They include, but are not limited to, a group  
31 of computer instructions commonly called viruses or worms, that  
32 are self-replicating or self-propagating and are designed to  
33 contaminate other computer programs or computer data, consume  
34 computer resources, modify, destroy, record, or transmit data, or  
35 in some other fashion usurp the normal operation of the computer,  
36 computer system, or computer network.

37 (13) “Internet domain name” means a globally unique,  
38 hierarchical reference to an Internet host or service, assigned  
39 through centralized Internet naming authorities, comprising a series

1 of character strings separated by periods, with the rightmost  
2 character string specifying the top of the hierarchy.

3 (14) “Electronic mail” means an electronic message or computer  
4 file that is transmitted between two or more telecommunications  
5 devices; computers; computer networks, regardless of whether the  
6 network is a local, regional, or global network; or electronic devices  
7 capable of receiving electronic messages, regardless of whether  
8 the message is converted to hard copy format after receipt, viewed  
9 upon transmission, or stored for later retrieval.

10 (15) “Profile” means either of the following:

11 (A) A configuration of user data required by a computer so that  
12 the user may access programs or services and have the desired  
13 functionality on that computer.

14 (B) An Internet Web site user’s personal page or section of a  
15 page that is made up of data, in text or graphical form, that displays  
16 significant, unique, or identifying information, including, but not  
17 limited to, listing acquaintances, interests, associations, activities,  
18 or personal statements.

19 (16) (A) “Ransomware” means a computer *or data* contaminant  
20 *or lock placed in or introduced into a computer system, computer*  
21 *or data in a computer system, or computer* that restricts access to  
22 ~~the infected computer system system, computer, or data~~ in some  
23 ~~way way,~~ and *under circumstances in which the person responsible*  
24 ~~for the ransomware demands that the user pay a ransom to the~~  
25 ~~person responsible for the computer contaminant~~ *payment of money*  
26 *or other consideration* to remove the restriction. ~~Ransomware may~~  
27 ~~systematically encrypt files on the system’s hard drive, which~~  
28 ~~become difficult or impossible to decrypt without paying the~~  
29 ~~ransom for the encryption key or other unlocking device, or may~~  
30 ~~simply lock the system and display messages intended to coax the~~  
31 ~~user into paying.~~ *contaminant, unlock the computer system or*  
32 *computer, or repair the injury done to the computer system,*  
33 *computer, or data by the contaminant or lock.*

34 (B) *A person is responsible for placing or introducing a*  
35 *contaminant or lock into a computer system, computer or data on*  
36 *a computer system, or computer if the person directly places or*  
37 *introduces the contaminant or lock, directs another to do so, or*  
38 *induces another person do so, with the intent of demanding*  
39 *payment or other consideration to remove the contaminant, unlock*

1 *the computer system or computer, or repair the computer system,*  
2 *computer or data on the computer system, or computer.*

3 (c) Except as provided in subdivision (h), any person who  
4 commits any of the following acts is guilty of a public offense:

5 (1) Knowingly accesses and without permission alters, damages,  
6 deletes, destroys, or otherwise uses any data, computer, computer  
7 system, or computer network in order to either (A) devise or  
8 execute any scheme or artifice to defraud, deceive, or extort, or  
9 (B) wrongfully control or obtain money, property, or data.

10 (2) Knowingly accesses and without permission takes, copies,  
11 or makes use of any data from a computer, computer system, or  
12 computer network, or takes or copies any supporting  
13 documentation, whether existing or residing internal or external  
14 to a computer, computer system, or computer network.

15 (3) Knowingly and without permission uses or causes to be used  
16 computer services.

17 (4) Knowingly accesses and without permission adds, alters,  
18 damages, deletes, or destroys any data, computer software, or  
19 computer programs which reside or exist internal or external to a  
20 computer, computer system, or computer network.

21 (5) Knowingly and without permission disrupts or causes the  
22 disruption of computer services or denies or causes the denial of  
23 computer services to an authorized user of a computer, computer  
24 system, or computer network.

25 (6) Knowingly and without permission provides or assists in  
26 providing a means of accessing a computer, computer system, or  
27 computer network in violation of this section.

28 (7) Knowingly and without permission accesses or causes to be  
29 accessed any computer, computer system, or computer network.

30 (8) Knowingly introduces any computer contaminant into any  
31 computer, computer system, or computer network.

32 (9) Knowingly and without permission uses the Internet domain  
33 name or profile of another individual, corporation, or entity in  
34 connection with the sending of one or more electronic mail  
35 messages or posts and thereby damages or causes damage to a  
36 computer, computer data, computer system, or computer network.

37 (10) Knowingly and without permission disrupts or causes the  
38 disruption of government computer services or denies or causes  
39 the denial of government computer services to an authorized user  
40 of a government computer, computer system, or computer network.

1 (11) Knowingly accesses and without permission adds, alters,  
2 damages, deletes, or destroys any data, computer software, or  
3 computer programs which reside or exist internal or external to a  
4 public safety infrastructure computer system computer, computer  
5 system, or computer network.

6 (12) Knowingly and without permission disrupts or causes the  
7 disruption of public safety infrastructure computer system computer  
8 services or denies or causes the denial of computer services to an  
9 authorized user of a public safety infrastructure computer system  
10 computer, computer system, or computer network.

11 (13) Knowingly and without permission provides or assists in  
12 providing a means of accessing a computer, computer system, or  
13 public safety infrastructure computer system computer, computer  
14 system, or computer network in violation of this section.

15 (14) Knowingly introduces any computer contaminant into any  
16 public safety infrastructure computer system computer, computer  
17 system, or computer network.

18 (15) Knowingly introduces ransomware into any computer,  
19 computer system, or computer network.

20 (d) (1) Any person who violates any of the provisions of  
21 paragraph (1), (2), (4), (5), (10), (11), or (12) of subdivision (c) is  
22 guilty of a felony, punishable by imprisonment pursuant to  
23 subdivision (h) of Section 1170 for 16 months, or two or three  
24 years and a fine not exceeding ten thousand dollars (\$10,000), or  
25 a misdemeanor, punishable by imprisonment in a county jail not  
26 exceeding one year, by a fine not exceeding five thousand dollars  
27 (\$5,000), or by both that fine and imprisonment.

28 (2) Any person who violates paragraph (3) of subdivision (c)  
29 is punishable as follows:

30 (A) For the first violation that does not result in injury, and  
31 where the value of the computer services used does not exceed  
32 nine hundred fifty dollars (\$950), by a fine not exceeding five  
33 thousand dollars (\$5,000), or by imprisonment in a county jail not  
34 exceeding one year, or by both that fine and imprisonment.

35 (B) For any violation that results in a victim expenditure in an  
36 amount greater than five thousand dollars (\$5,000) or in an injury,  
37 or if the value of the computer services used exceeds nine hundred  
38 fifty dollars (\$950), or for any second or subsequent violation, by  
39 a fine not exceeding ten thousand dollars (\$10,000), or by  
40 imprisonment pursuant to subdivision (h) of Section 1170 for 16

1 months, or two or three years, or by both that fine and  
2 imprisonment, or by a fine not exceeding five thousand dollars  
3 (\$5,000), or by imprisonment in a county jail not exceeding one  
4 year, or by both that fine and imprisonment.

5 (3) Any person who violates paragraph (6), (7), or (13) of  
6 subdivision (c) is punishable as follows:

7 (A) For a first violation that does not result in injury, an  
8 infraction punishable by a fine not exceeding one thousand dollars  
9 (\$1,000).

10 (B) For any violation that results in a victim expenditure in an  
11 amount not greater than five thousand dollars (\$5,000), or for a  
12 second or subsequent violation, by a fine not exceeding five  
13 thousand dollars (\$5,000), or by imprisonment in a county jail not  
14 exceeding one year, or by both that fine and imprisonment.

15 (C) For any violation that results in a victim expenditure in an  
16 amount greater than five thousand dollars (\$5,000), by a fine not  
17 exceeding ten thousand dollars (\$10,000), or by imprisonment  
18 pursuant to subdivision (h) of Section 1170 for 16 months, or two  
19 or three years, or by both that fine and imprisonment, or by a fine  
20 not exceeding five thousand dollars (\$5,000), or by imprisonment  
21 in a county jail not exceeding one year, or by both that fine and  
22 imprisonment.

23 (4) Any person who violates paragraph (8) or (14) of subdivision  
24 (c) is punishable as follows:

25 (A) For a first violation that does not result in injury, a  
26 misdemeanor punishable by a fine not exceeding five thousand  
27 dollars (\$5,000), or by imprisonment in a county jail not exceeding  
28 one year, or by both that fine and imprisonment.

29 (B) For any violation that results in injury, or for a second or  
30 subsequent violation, by a fine not exceeding ten thousand dollars  
31 (\$10,000), or by imprisonment in a county jail not exceeding one  
32 year, or by imprisonment pursuant to subdivision (h) of Section  
33 1170, or by both that fine and imprisonment.

34 (5) Any person who violates paragraph (9) of subdivision (c)  
35 is punishable as follows:

36 (A) For a first violation that does not result in injury, an  
37 infraction punishable by a fine not exceeding one thousand dollars  
38 (\$1,000).

39 (B) For any violation that results in injury, or for a second or  
40 subsequent violation, by a fine not exceeding five thousand dollars



1 (\$5,000), or by imprisonment in a county jail not exceeding one  
2 year, or by both that fine and imprisonment.

3 (6) Any person who violates paragraph (15) of subdivision (c)  
4 is guilty of a felony, punishable by imprisonment pursuant to  
5 subdivision (h) of Section 1170 for two, three, or four years and  
6 a fine not exceeding ten thousand dollars (\$10,000). *Prosecution*  
7 *under this paragraph does not prohibit or limit prosecution under*  
8 *any other law.*

9 (e) (1) In addition to any other civil remedy available, the owner  
10 or lessee of the computer, computer system, computer network,  
11 computer program, or data who suffers damage or loss by reason  
12 of a violation of any of the provisions of subdivision (c) may bring  
13 a civil action against the violator for compensatory damages and  
14 injunctive relief or other equitable relief. Compensatory damages  
15 shall include any expenditure reasonably and necessarily incurred  
16 by the owner or lessee to verify that a computer system, computer  
17 network, computer program, or data was or was not altered,  
18 damaged, or deleted by the access. For the purposes of actions  
19 authorized by this subdivision, the conduct of an unemancipated  
20 minor shall be imputed to the parent or legal guardian having  
21 control or custody of the minor, pursuant to the provisions of  
22 Section 1714.1 of the Civil Code.

23 (2) In any action brought pursuant to this subdivision the court  
24 may award reasonable attorney's fees.

25 (3) A community college, state university, or academic  
26 institution accredited in this state is required to include  
27 computer-related crimes as a specific violation of college or  
28 university student conduct policies and regulations that may subject  
29 a student to disciplinary sanctions up to and including dismissal  
30 from the academic institution. This paragraph shall not apply to  
31 the University of California unless the Board of Regents adopts a  
32 resolution to that effect.

33 (4) In any action brought pursuant to this subdivision for a  
34 willful violation of the provisions of subdivision (c), where it is  
35 proved by clear and convincing evidence that a defendant has been  
36 guilty of oppression, fraud, or malice as defined in subdivision (c)  
37 of Section 3294 of the Civil Code, the court may additionally award  
38 punitive or exemplary damages.

1 (5) No action may be brought pursuant to this subdivision unless  
2 it is initiated within three years of the date of the act complained  
3 of, or the date of the discovery of the damage, whichever is later.

4 (f) This section shall not be construed to preclude the  
5 applicability of any other provision of the criminal law of this state  
6 which applies or may apply to any transaction, nor shall it make  
7 illegal any employee labor relations activities that are within the  
8 scope and protection of state or federal labor laws.

9 (g) Any computer, computer system, computer network, or any  
10 software or data, owned by the defendant, that is used during the  
11 commission of any public offense described in subdivision (c) or  
12 any computer, owned by the defendant, which is used as a  
13 repository for the storage of software or data illegally obtained in  
14 violation of subdivision (c) shall be subject to forfeiture, as  
15 specified in Section 502.01.

16 (h) (1) Subdivision (c) does not apply to punish any acts which  
17 are committed by a person within the scope of his or her lawful  
18 employment. For purposes of this section, a person acts within the  
19 scope of his or her employment when he or she performs acts  
20 which are reasonably necessary to the performance of his or her  
21 work assignment.

22 (2) Paragraph (3) of subdivision (c) does not apply to penalize  
23 any acts committed by a person acting outside of his or her lawful  
24 employment, provided that the employee's activities do not cause  
25 an injury, to the employer or another, or provided that the value  
26 of supplies or computer services which are used does not exceed  
27 an accumulated total of two hundred fifty dollars (\$250).

28 (i) No activity exempted from prosecution under paragraph (2)  
29 of subdivision (h) which incidentally violates paragraph (2), (4),  
30 or (7) of subdivision (c) shall be prosecuted under those paragraphs.

31 (j) For purposes of bringing a civil or a criminal action under  
32 this section, a person who causes, by any means, the access of a  
33 computer, computer system, or computer network in one  
34 jurisdiction from another jurisdiction is deemed to have personally  
35 accessed the computer, computer system, or computer network in  
36 each jurisdiction.

37 (k) In determining the terms and conditions applicable to a  
38 person convicted of a violation of this section the court shall  
39 consider the following:

1 (1) The court shall consider prohibitions on access to and use  
2 of computers.

3 (2) Except as otherwise required by law, the court shall consider  
4 alternate sentencing, including community service, if the defendant  
5 shows remorse and recognition of the wrongdoing, and an  
6 inclination not to repeat the offense.

7 SEC. 2. No reimbursement is required by this act pursuant to  
8 Section 6 of Article XIII B of the California Constitution because  
9 the only costs that may be incurred by a local agency or school  
10 district will be incurred because this act creates a new crime or  
11 infraction, eliminates a crime or infraction, or changes the penalty  
12 for a crime or infraction, within the meaning of Section 17556 of  
13 the Government Code, or changes the definition of a crime within  
14 the meaning of Section 6 of Article XIII B of the California  
15 Constitution.

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