

# SENATE, No. 343

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## STATE OF NEW JERSEY 219th LEGISLATURE

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PRE-FILED FOR INTRODUCTION IN THE 2020 SESSION

**Sponsored by:**

**Senator BOB SMITH**

**District 17 (Middlesex and Somerset)**

**Senator PATRICK J. DIEGNAN, JR.**

**District 18 (Middlesex)**

**SYNOPSIS**

Directs New Jersey Cybersecurity and Communications Integration Cell, Office of Information Technology, and New Jersey Big Data Alliance to develop advanced cyberinfrastructure strategic plan.

**CURRENT VERSION OF TEXT**

Introduced Pending Technical Review by Legislative Counsel.



1 **AN ACT** directing the New Jersey Cybersecurity and  
2 Communications Integration Cell, the Office of Information  
3 Technology, and the New Jersey Big Data Alliance to develop an  
4 advanced cyberinfrastructure strategic plan and supplementing  
5 Title 52 of the Revised Statutes.

6

7 **BE IT ENACTED** *by the Senate and General Assembly of the State*  
8 *of New Jersey:*

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10 1. a. The New Jersey Cybersecurity and Communications  
11 Integration Cell, established pursuant to Executive Order No. 178 of  
12 2015 within the New Jersey Office of Homeland Security and  
13 Preparedness, the Office of Information Technology, and the New  
14 Jersey Big Data Alliance shall coordinate to establish an advanced  
15 cyberinfrastructure strategic plan for the State, which shall include,  
16 but not be limited to: (1) assessing the State's cyberinfrastructure,  
17 public and privately-owned, including, high performance  
18 computing, data storage systems, advanced instrumentation, data  
19 center facilities, visualization environments, the human expertise  
20 necessary to operate the cyberinfrastructure, and the software and  
21 advanced networks that link these resources together; (2) creating a  
22 roadmap for implementing advanced cyberinfrastructure  
23 improvements throughout the State, which shall include, but not be  
24 limited to the development of a shared data cloud that integrates  
25 data infrastructure, hosted data and data analytics, and the  
26 development of a high speed network infrastructure. The shared  
27 data cloud shall host an open data repository to address big data  
28 challenges and catalyze collaborations between academia, industry,  
29 and government; (3) recommending implementation strategies and  
30 policies for improving the State's cyberinfrastructure to promote  
31 economic development in this State; (4) identifying the benefits and  
32 the essential applications of cyberinfrastructure; (5) recommending  
33 workforce development strategies to ensure that the necessary  
34 human expertise is in place; (6) identifying the means of using  
35 advanced cyberinfrastructure to drive economic development and  
36 facilitate the creation of public-private partnerships; and (7)  
37 identifying cybersecurity risk mitigation strategies to help ensure  
38 public safety and privacy controls are comprehensively integrated  
39 into the State's cyberinfrastructure.

40 b. The New Jersey Cybersecurity and Communications  
41 Integration Cell, Office of Information Technology, and the New  
42 Jersey Big Data Alliance shall submit the advanced  
43 cyberinfrastructure strategic plan to the Governor, pursuant to  
44 section 2 of P.L.1991, c.164 (C.52:14-19.1), and to the Legislature  
45 no later than one year following the effective date of  
46 P.L. , c. (C. ) (pending before the Legislature as this bill).

1 c. As used in this section:

2 “Big data” means high volume information assets, high velocity  
3 information assets, high variety information assets, or all three, that  
4 require new forms of processing to enable enhanced decision  
5 making, insight discovery, and process optimization.

6 The term “cyberinfrastructure” includes, but is not limited to,  
7 data networks, computational facilities, computing resources, large  
8 data sets, specialized software applications, information technology  
9 usage improvements, and the human expertise necessary to develop  
10 and manage such resources.

11 “New Jersey Big Data Alliance” means the consortium  
12 designated as the State’s advanced cyberinfrastructure consortium  
13 pursuant to section 1 of P.L.2014, c.33 (C.52:17C-3.4), and, as of  
14 the effective date of P.L. , c. (C. ) (pending before the  
15 Legislature as this bill), consisting of the following institutions and  
16 academically oriented organizations: Rutgers, the State University  
17 of New Jersey; Princeton University; New Jersey Institute of  
18 Technology; Rowan University; The College of New Jersey;  
19 Felician University; New Jersey City University; Ramapo College  
20 of New Jersey; Rider University; Saint Peter’s University; Seton  
21 Hall University; Stockton University; Kean University; Montclair  
22 State University; the Stevens Institute of Technology; William  
23 Paterson University of New Jersey; and the nonprofit organization  
24 and technology services provider NJEdge.

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26 2. This act shall take effect immediately.

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#### STATEMENT

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31 This bill directs the New Jersey Cybersecurity and  
32 Communications Integration Cell, the Office of Information  
33 Technology, and the New Jersey Big Data Alliance to coordinate  
34 and establish an advanced cyberinfrastructure strategic plan. The  
35 advanced cyberinfrastructure strategic plan is to include, but is not  
36 to be limited to: 1) assessing the State’s cyberinfrastructure, public  
37 and privately-owned, including, high performance computing, data  
38 storage systems, advanced instrumentation, data center facilities,  
39 visualization environments, the human expertise necessary to  
40 operate the cyberinfrastructure, and the software and advanced  
41 networks that link these resources together; 2) creating a roadmap  
42 for implementing advanced cyberinfrastructure improvements  
43 throughout the State, which shall include, but not be limited to the  
44 development of a shared data cloud that integrates data  
45 infrastructure, hosted data, and data analytics, and the development  
46 of a high speed network infrastructure. The shared data cloud is to

1 host an open data repository to address big data challenges and  
2 catalyze collaborations between academia, industry, and  
3 government; 3) recommending implementation strategies and  
4 policies for improving the State’s cyberinfrastructure; 4) identifying  
5 the benefits and the essential applications of cyberinfrastructure; 5)  
6 recommending workforce development strategies to ensure that the  
7 necessary human expertise is in place; 6) identifying the means of  
8 using advanced cyberinfrastructure to drive economic development  
9 and facilitate the creation of public private partnerships; and 7)  
10 identifying cybersecurity risk mitigation strategies to help ensure  
11 public safety and privacy controls are comprehensively integrated  
12 into the State’s cyberinfrastructure.

13 Under the bill, “big data” is defined to mean high volume  
14 information assets, high velocity information assets, high variety  
15 information assets, or all three, that require new forms of processing  
16 to enable enhanced decision making, insight discovery, and process  
17 optimization. The term “cyberinfrastructure” includes, but is not  
18 limited to, data networks, computational facilities, computing  
19 resources, large data sets, specialized software applications,  
20 information technology usage improvements, and the human  
21 expertise necessary to develop and manage such resources.

22 The bill defines “New Jersey Big Data Alliance” to mean the  
23 consortium designated as the State’s advanced cyberinfrastructure  
24 consortium, consisting of the following institutions and  
25 academically oriented organizations: Rutgers, the State University  
26 of New Jersey; Princeton University; New Jersey Institute of  
27 Technology; Rowan University; The College of New Jersey;  
28 Felician University; New Jersey City University; Ramapo College  
29 of New Jersey; Rider University; Saint Peter’s University; Seton  
30 Hall University; Stockton University; Kean University; Montclair  
31 State University; the Stevens Institute of Technology; William  
32 Paterson University of New Jersey; and the nonprofit organization  
33 and technology services provider NJEdge.