## ASSEMBLY, No. 3546 STATE OF NEW JERSEY 218th LEGISLATURE

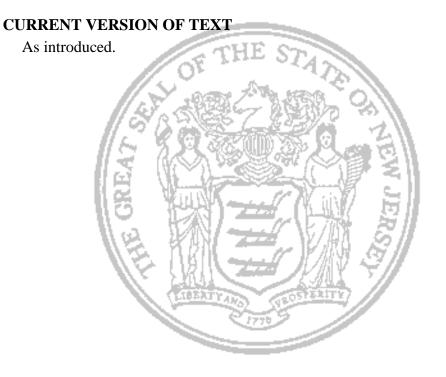
INTRODUCED MARCH 5, 2018

Sponsored by: Assemblyman RAJ MUKHERJI District 33 (Hudson) Assemblywoman ANNETTE CHAPARRO District 33 (Hudson) Assemblyman NICHOLAS CHIARAVALLOTI District 31 (Hudson)

Co-Sponsored by: Assemblyman Calabrese

## **SYNOPSIS**

Directs Rutgers Discovery Informatics Institute, Office of Information Technology, and New Jersey Big Data Alliance to develop advanced cyberinfrastructure strategic plan; appropriates \$150,000.



(Sponsorship Updated As Of: 5/25/2018)

## A3546 MUKHERJI, CHAPARRO

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AN ACT directing the Rutgers Discovery Informatics Institute,
 Office of Information Technology, and the New Jersey Big Data
 Alliance to develop an advanced cyberinfrastructure strategic
 plan, supplementing Title 52 of the Revised Statutes and making
 an appropriation.

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

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10 1. a. The Rutgers Discovery Informatics Institute, Office of 11 Information Technology, and the New Jersey Big Data Alliance shall coordinate to establish an advanced cyberinfrastructure 12 strategic plan for the State, which shall include, but not be limited 13 14 to: (1) assessing the State's cyberinfrastructure, public and 15 privately-owned, including, high performance computing, data 16 storage systems, advanced instrumentation, data center facilities, 17 visualization environments, the human expertise necessary to 18 operate the cyberinfrastructure, and the software and advanced 19 networks that link these resources together; (2) creating a roadmap 20 for implementing advanced cyberinfrastructure improvements throughout the State, which shall include, but not be limited to the 21 development of a shared data cloud that integrates data 22 23 infrastructure, hosted data and data analytics, and the development 24 of a high speed network infrastructure. The shared data cloud shall 25 host an open data repository to address big data challenges and 26 collaborations between academia, catalyze industry, and 27 government; (3) recommending implementation strategies and policies for improving the State's cyberinfrastructure to promote 28 29 economic development in this State; (4) identifying the benefits and 30 the essential applications of cyberinfrastructure; (5) recommending 31 workforce development strategies to ensure that the necessary human expertise is in place; and (6) identifying the means of using 32 33 advanced cyberinfrastructure to drive economic development and 34 facilitate the creation of public-private partnerships.

b. The Rutgers Discovery Informatics Institute, Office of
Information Technology, and the New Jersey Big Data Alliance
shall submit the advanced cyberinfrastructure strategic plan to the
Governor, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1),
and to the Legislature no later than one year following the effective
date of P.L. , c. (C. ) (pending before the Legislature as this
bill).

42 c. As used in this section:

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

47 The term "cyberinfrastructure" includes, but is not limited to,48 data networks, computational facilities, computing resources, large

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1 data sets, specialized software applications, information technology 2 usage improvements, and the human expertise necessary to develop 3 and manage such resources. "New Jersey Big Data Alliance" means a consortium consisting 4 5 of Rutgers, the State University, Princeton University, New Jersey 6 Institute of Technology, Rowan University Stockton University, 7 Kean University, Montclair State University, and the Stevens 8 Institute of Technology for the purpose of encouraging State 9 government, academia, and industry to address, in a strategic and 10 coordinated manner, the significant and immediate challenges posed 11 by the proliferation of big data sources and the resultant deluge of 12 digital data. 13 14 There shall be appropriated from the General Fund to the 2. 15 Rutgers Discovery Informatics Institute \$150,000 for the fiscal year 16 commencing July 1, 2017 to carry out the purposes of section 1 of 17 P.L., c. (C. ) (pending before the Legislature as this bill). 18 19 3. This act shall take effect immediately. 20 21 22 **STATEMENT** 23 24 This bill directs the Rutgers Discovery Informatics Institute, 25 Office of Information Technology, and the New Jersey Big Data 26 Alliance to coordinate and establish an advanced 27 cyberinfrastructure strategic plan. The advanced cyberinfrastructure strategic plan is to include, but is not to be limited to: (1) assessing 28 29 the State's cyberinfrastructure, public and privately-owned, 30 including, high performance computing, data storage systems, 31 advanced instrumentation, data center facilities, visualization 32 environments, the human expertise necessary to operate the cyberinfrastructure, and the software and advanced networks that 33 34 link these resources together; (2) creating a roadmap for 35 advanced cyberinfrastructure implementing improvements 36 throughout the State, which shall include, but not be limited to the 37 development of a shared data cloud that integrates data infrastructure, hosted data, and data analytics, and the development 38 39 of a high speed network infrastructure. The shared data cloud is to 40 host an open data repository to address big data challenges and 41 catalyze collaborations between academia, industry, and 42 government; (3) recommending implementation strategies and 43 policies for improving the State's cyberinfrastructure; (4) 44 identifying the benefits and the essential applications of 45 cyberinfrastructure; (5) recommending workforce development 46 strategies to ensure that the necessary human expertise is in place; 47 and (6) identifying the means of using advanced cyberinfrastructure

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to drive economic development and facilitate the creation of public
 private partnerships.

3 Under the bill, "big data" is defined to mean high volume information assets, high velocity information assets, high variety 4 5 information assets, or all three, that require new forms of processing to enable enhanced decision making, insight discovery, and process 6 7 optimization. The term "cyberinfrastructure" includes, but is not 8 limited to, data networks, computational facilities, computing 9 resources, large data sets, specialized software applications, 10 information technology usage improvements, and the human 11 expertise necessary to develop and manage such resources.

12 The bill defines "New Jersey Big Data Alliance" to mean a 13 consortium consisting of Rutgers, the State University, Princeton 14 University, the New Jersey Institute of Technology, Rowan 15 University, Stockton University, Kean University, Montclair State 16 University, and the Stevens Institute of Technology for the purpose 17 of encouraging New Jersey government, academia, and industry to 18 address, in a strategic and coordinated manner, the significant and 19 immediate challenges posed by the proliferation of big data sources 20 and the resultant deluge of digital data.

The bill provides for a \$150,000 appropriation from the General Fund to the Rutgers Discovery Informatics Institute for the fiscal year commencing July 1, 2017 to carry out the purposes of the bill.