

HOUSE BILL 1384

C8

2lr2879

By: **Delegate Qi**

Introduced and read first time: February 11, 2022

Assigned to: Ways and Means

Committee Report: Favorable with amendments

House action: Adopted

Read second time: March 26, 2022

CHAPTER _____

1 AN ACT concerning

2 **Economic Development – Industry 4.0 Technology Grant Program**
3 **(Maryland Manufacturing Innovation Act of 2022)**

4 FOR the purpose of establishing the Industry 4.0 Technology Grant Program in the
5 Department of Commerce to provide grants to certain small and medium–sized
6 manufacturing enterprises to assist those manufacturers with implementing new
7 Industry 4.0 technology or related infrastructure for certain purposes; creating the
8 Maryland Manufacturing 4.0 Initiative Governance Committee; requiring the
9 Governor to include in the annual budget bill a certain appropriation to the Program;
10 and generally relating to the Industry 4.0 Technology Grant Program for
11 manufacturers.

12 BY adding to

13 Article – Economic Development

14 Section ~~5–1901 and 5–1902~~ through 5–1903 to be under the new subtitle “Subtitle
15 19. Industry 4.0 Technology Grant Program”

16 Annotated Code of Maryland

17 (2018 Replacement Volume and 2021 Supplement)

18 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
19 That the Laws of Maryland read as follows:

20 **Article – Economic Development**

21 **SUBTITLE 19. INDUSTRY 4.0 TECHNOLOGY GRANT PROGRAM.**

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.

Underlining indicates amendments to bill.

~~Strike out~~ indicates matter stricken from the bill by amendment or deleted from the law by amendment.



1 5-1901.

2 (A) IN THIS SUBTITLE THE FOLLOWING WORDS HAVE THE MEANINGS
3 INDICATED.

4 (B) “COMMITTEE” MEANS THE MARYLAND MANUFACTURING 4.0
5 INITIATIVE GOVERNANCE COMMITTEE.

6 ~~(B)~~ (C) (1) “INDUSTRY 4.0 TECHNOLOGY” MEANS SMART HARDWARE
7 AND SOFTWARE MANUFACTURING TECHNOLOGIES.

8 (2) “INDUSTRY 4.0 TECHNOLOGY” INCLUDES:

9 (I) INDUSTRIAL INTERNET OF THINGS INFRASTRUCTURE
10 HARDWARE;

11 (II) ~~PREDICTIVE MAINTENANCE SOFTWARE~~ CLOUD COMPUTING
12 AND CYBERSECURITY SOLUTIONS;

13 (III) ~~SENSOR INTEGRATION INTO INDUSTRIAL TOOLS AND~~
14 ~~MACHINERY TO DETERMINE WEAR OR FLAWS~~ ARTIFICIAL INTELLIGENCE (AI) FOR
15 CONTINUOUS IMPROVEMENT OF EFFICIENCY AND PRODUCTIVITY;

16 (IV) ~~INDUSTRIAL WEARABLE TECHNOLOGY INTEGRATION TO~~
17 ~~PREVENT EMPLOYEE INJURIES~~ ROBOTS AND AUTONOMOUS EQUIPMENT TO HELP
18 AUTOMATE WORKFLOW;

19 (V) DATA ANALYTICS AND VISUALIZATION SOFTWARE;

20 (VI) ~~SENSOR TRANSMISSION OF REAL TIME INFORMATION~~
21 ~~FROM FACTORY FLOOR TO CUSTOMERS OR SUPPLIERS~~ CYBER PHYSICAL SYSTEMS
22 (CPS) TO ENABLE SEAMLESS COMMUNICATION WITH OTHER “SMART” DEVICES;
23 AND

24 (VII) ~~RADIO FREQUENCY IDENTIFICATION (RFID) TAGGING~~
25 ~~SOFTWARE AND EQUIPMENT UTILIZED TO TRACK INVENTORY~~ AUGMENTED REALITY,
26 VIRTUAL REALITY, AND DIGITAL TWIN TO DIGITALLY REPRESENT PHYSICAL
27 PRODUCTS OR SYSTEMS WITHOUT REQUIRING INVESTMENT TO ITERATIVELY
28 CREATE THE ACTUAL PRODUCTS.

29 (D) “MINORITY BUSINESS ENTERPRISE” HAS THE MEANING STATED IN §
30 14-301 OF THE STATE FINANCE AND PROCUREMENT ARTICLE.

1 ~~(E)~~ (E) “PROGRAM” MEANS THE INDUSTRY 4.0 TECHNOLOGY GRANT
2 PROGRAM.

3 ~~(F)~~ (F) “SME MANUFACTURER” MEANS A SMALL OR MEDIUM-SIZED
4 ENTERPRISE MANUFACTURER.

5 5-1902.

6 (A) THERE IS A MARYLAND MANUFACTURING 4.0 INITIATIVE
7 GOVERNANCE COMMITTEE IN THE DEPARTMENT.

8 (B) (1) THE SECRETARY SHALL APPOINT THE MEMBERS OF THE
9 COMMITTEE, INCLUDING REPRESENTATIVES OF MANUFACTURING ORGANIZATIONS
10 IN THE STATE AND THE DEPARTMENT.

11 (2) THE MEMBERSHIP OF THE COMMITTEE SHALL REPRESENT THE
12 DIVERSITY OF THE STATE.

13 (C) THE COMMITTEE SHALL:

14 (1) RESEARCH BEST PRACTICES FROM OTHER STATES IN
15 IMPLEMENTING PROGRAMS SIMILAR TO THE PROGRAM, INCLUDING ELIGIBILITY
16 CRITERIA, APPLICATION PROCESSES, PROGRAM REQUIREMENTS, WORKFORCE
17 TRANSITION SUPPORT STRATEGIES, AND THE DISSEMINATION OF FUNDS;

18 (2) ESTABLISH THE PROGRAM APPLICATION PROCESS FOR SME
19 MANUFACTURERS THAT REPRESENTS BEST PRACTICES;

20 (3) ESTABLISH ELIGIBILITY CRITERIA FOR PARTICIPATION IN THE
21 PROGRAM THAT REPRESENT BEST PRACTICES, INCLUDING WITH RESPECT TO
22 MANUFACTURER SIZE;

23 (4) CREATE GUIDELINES FOR THE DISTRIBUTION AND USE OF
24 PROGRAM FUNDS THAT REPRESENT BEST PRACTICES; AND

25 (5) IN COLLABORATION WITH THE GOVERNOR’S OFFICE OF SMALL,
26 MINORITY, AND WOMEN BUSINESS AFFAIRS, ENCOURAGE PARTICIPATION OF
27 MINORITY BUSINESS ENTERPRISES IN THE PROGRAM.

28 5-1903.

29 (A) THERE IS AN INDUSTRY 4.0 TECHNOLOGY GRANT PROGRAM IN THE
30 DEPARTMENT.

1 (B) THE PURPOSE OF THE PROGRAM IS TO ASSIST SME MANUFACTURERS
2 IN ADOPTING INDUSTRY 4.0 TECHNOLOGY AND RELATED INFRASTRUCTURE IN
3 ORDER TO INCREASE PRODUCTIVITY, EFFICIENCY, AND COMPETITIVENESS IN THE
4 STATE AND NATIONAL MANUFACTURING ENVIRONMENT.

5 (C) TO QUALIFY FOR A GRANT UNDER THE PROGRAM, AN SME
6 MANUFACTURER SHALL SUBMIT TO THE DEPARTMENT AN APPLICATION THAT:

7 (1) MEETS THE REQUIREMENTS ESTABLISHED BY THE COMMITTEE
8 UNDER § 5-1902 OF THIS SUBTITLE;

9 ~~(1)~~ (2) DEMONSTRATES THAT THE COMPANY IS A QUALIFYING SME
10 MANUFACTURER; AND

11 ~~(2)~~ (3) DESCRIBES THE SME MANUFACTURER'S PLANS TO:

12 (I) MAKE A CAPITAL INVESTMENT IN THE FORM OF SMART
13 INDUSTRY 4.0 TECHNOLOGY MANUFACTURING TECHNOLOGIES WITHIN ITS
14 MARYLAND OPERATION; OR

15 (II) MAKE A CAPITAL INVESTMENT FOR THE PROPER
16 INFRASTRUCTURE FOR IMPLEMENTATION OF INDUSTRY 4.0 TECHNOLOGY.

17 (D) (1) SUBJECT TO THE LIMITATION UNDER PARAGRAPH (2) OF THIS
18 SUBSECTION, IN AWARDING GRANTS UNDER THE PROGRAM, THE DEPARTMENT
19 SHALL AWARD A DOLLAR-FOR-DOLLAR MATCHING GRANT FOR THE COST OF EACH
20 ELIGIBLE PROJECT.

21 (2) ~~THE DEPARTMENT MAY NOT AWARD MORE THAN \$25,000 IN~~
22 ~~QUALIFYING GRANTS TO A SINGLE SME MANUFACTURER.~~ A GRANT AWARDED TO AN
23 SME MANUFACTURER SHALL BE AT LEAST \$25,000.

24 (E) (1) A GRANT AWARDED UNDER THE PROGRAM MAY BE USED, IN
25 ACCORDANCE WITH THE GUIDELINES ESTABLISHED BY THE COMMITTEE, FOR
26 PROJECTS THAT DIRECTLY AFFECT MANUFACTURING PROCESSES AND FOCUS ON
27 INVESTMENTS IN INDUSTRY 4.0 TECHNOLOGY COMMERCIAL-READY EQUIPMENT
28 THROUGH ESTABLISHED VENDORS, OR RELATED INFRASTRUCTURE.

29 (2) WITHIN 1 YEAR AFTER RECEIVING A GRANT UNDER THE
30 PROGRAM, AN SME MANUFACTURER SHALL SUBMIT TO THE DEPARTMENT A
31 LETTER THAT:

32 (I) DESCRIBES HOW THE GRANT FUNDING WAS USED; AND

1 (II) INCLUDES ANY INVOICES RELATED TO THE
2 IMPLEMENTATION OF THE INDUSTRY 4.0 TECHNOLOGY OR RELATED
3 INFRASTRUCTURE.

4 (3) THE DEPARTMENT MAY REQUIRE A GRANT RECIPIENT THAT
5 FAILS TO FULFILL THE REQUIREMENTS OF THE GRANT TO RETURN ALL OR PART OF
6 THE GRANT TO THE PROGRAM.

7 (F) FOR FISCAL YEAR 2024 AND EACH FISCAL YEAR THEREAFTER, THE
8 GOVERNOR SHALL INCLUDE IN THE ANNUAL BUDGET BILL AN APPROPRIATION OF
9 ~~\$5,000,000~~ \$1,000,000 FOR THE PROGRAM.

10 (G) THE SECRETARY SHALL ADOPT REGULATIONS NECESSARY TO CARRY
11 OUT THIS SECTION.

12 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
13 October 1, 2022. It shall remain effective for a period of 3 years and, at the end of September
14 30, 2025, this Act, with no further action required by the General Assembly, shall be
15 abrogated and of no further force and effect.

Approved:

Governor.

Speaker of the House of Delegates.

President of the Senate.