



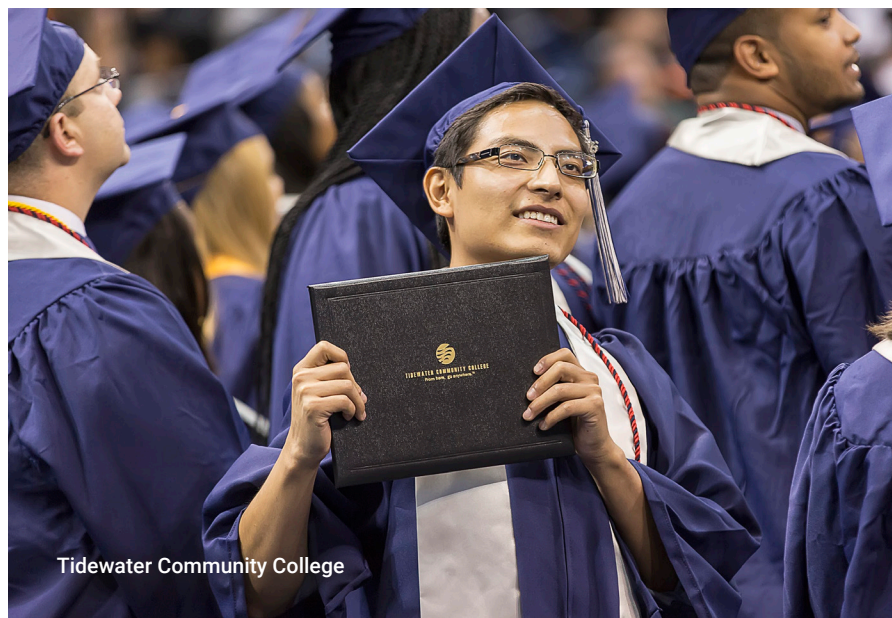
Danville Community College



Wytheville Community College



Virginia Western Community College



Tidewater Community College

ADDENDUM REPORT TO THE MARCH 2023 Review of the G3 Program's Alignment to the Virginia Labor Market

December 2023

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Introduction

Introduction

This brief is an addendum to the March 2023 Virginia Office of Education Economics (VOEE) report, “Review of the G3 Program’s Alignment to the Virginia Labor Market.” That report, directed by Item 213 D.2. of Chapter 2 of the 2022 Acts of Assembly, Special Session I (the 2022–24 Biennial Budget), charged VOEE with evaluating the level of alignment between the 92 G3-specific fields of study identified in budget language and their associated occupations in the labor market. Because of the newness of the G3 program, first-year outcomes data were not available to VOEE at the time of the analysis. Since the VOEE report was published in the spring of 2023, two full years of outcomes data have been released by the Virginia Community College System (VCCS). This brief examines these data as part of the original charge given to VOEE. In future years, outcomes data will be included in G3 labor market analyses.

The data used for this analysis were sourced from the appendix of VCCS’ G3 2022–23 Annual Report. The analysis examines educational program data using the National Center for Education Statistics (NCES) Classification of Instructional Program (CIP) taxonomy at the two-digit series level and six-digit field of study level.

G3 Outcomes Summary

G3 Outcomes Summary

In the Academic Year (AY) 2022–23, G3 last-dollar financial aid supported a total enrollment of 13,103 students, 4,795 of whom earned a degree or other award. Students were enrolled in 114 programs, including associate degree programs, for-credit programs of less than two years, and noncredit credential programs. Students at all 23 VCCS institutions received G3 financial aid. Among students in G3-eligible programs, 20% of enrollees and 20% of award earners received financial aid through G3, while 8% of all of all VCCS enrollees and almost 10% of all award/degree earners received aid through G3.

Figures 1 and 2 present enrollment and award-earners data in G3-eligible, for-credit programs by VCCS institution.

Figure 1

Number of Students Enrolled in G3-Eligible, For-Credit Programs in AY 2022–23, by VCCS Institution

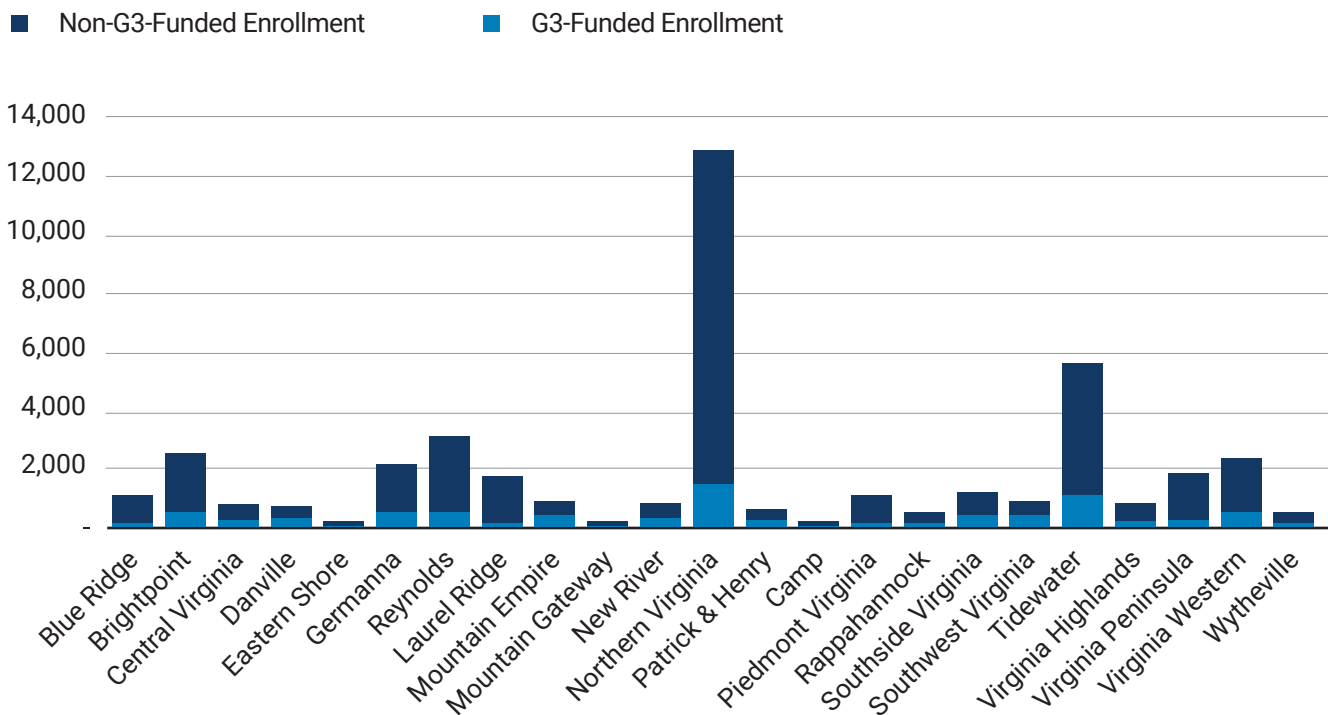
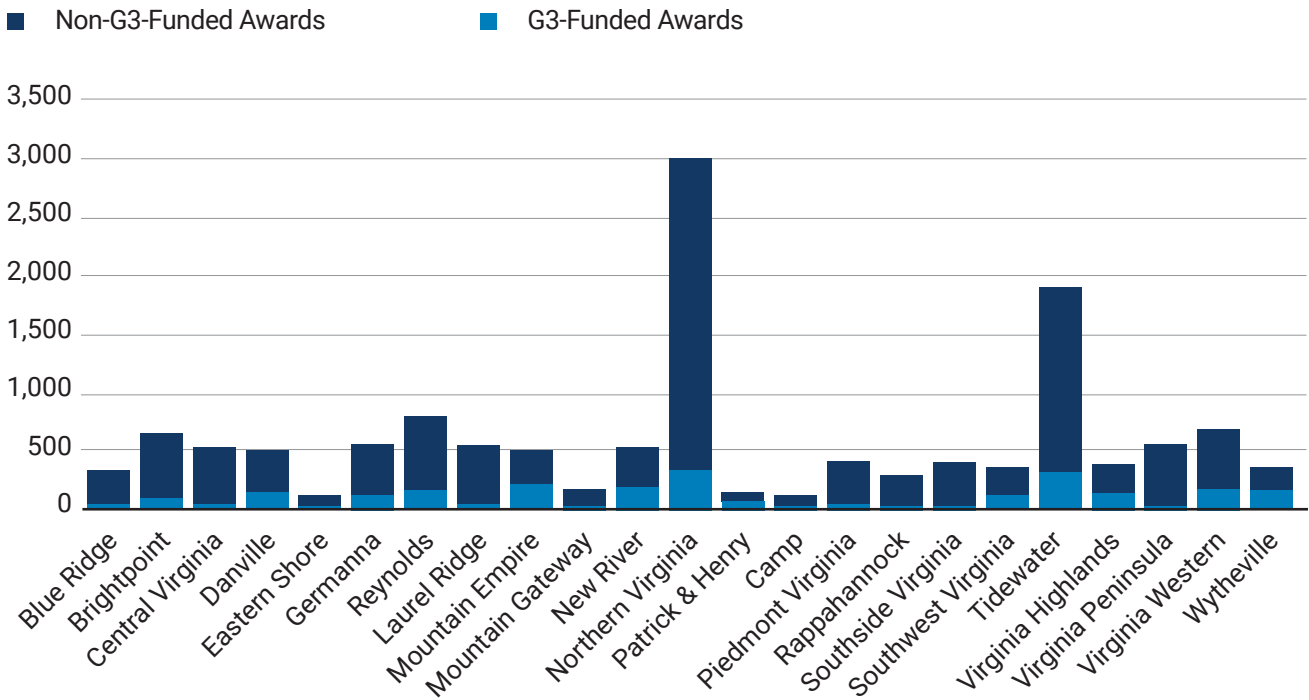


Figure 2

Number of Students Who Received Degrees/Awards in G3-Eligible, For-Credit Programs in AY 2022–23, by VCCS Institution

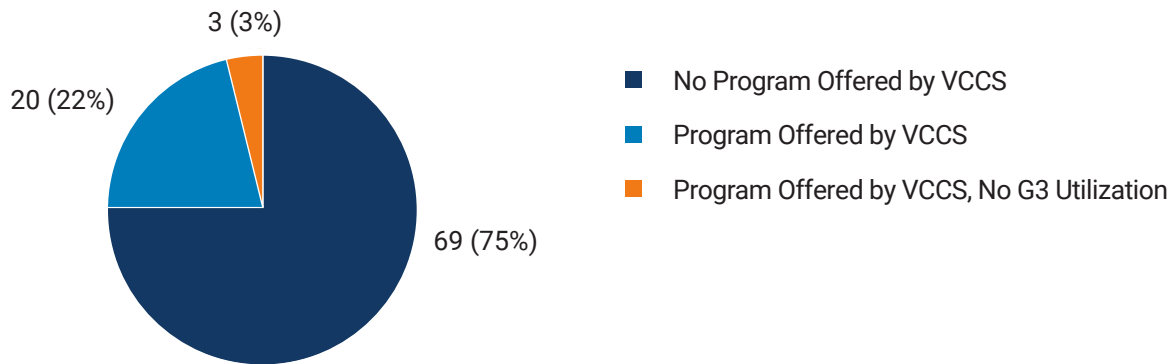


G3 Funding by Eligible CIP for Academic Year 2022–23

The legislation authorizing the G3 program designates 92 six-digit CIPs as eligible for G3 funding. In AY 2022–2023, students in 69 (75%) eligible programs and 11 two-digit CIP families received G3 financial aid. The chart in Figure 3 compares the proportion of eligible CIPs that did and did not enroll students with G3 funding in 2022–2023.

Figure 3

Number and Proportion of G3-Eligible Credit and Noncredit Programs Offered by VCCS in AY 2022–23¹



¹ G3 eligibility is determined by six-digit CIP.

As Figure 3 shows, 20 out of the 92 CIPs named in the G3 legislation (22%) did not enroll any students with G3 funding. Three of these programs were offered by VCCS institutions, but none of the enrollees received G3 funding. This could be because enrollees were ineligible for G3 based on their income, their tuition was completely funded by other financial aid sources, or for other reasons not clear from the data.

VCCS did not offer programming for the other 20 G3-eligible CIPs. However, they did offer programs in related education categories (comparable by four-digit CIP) for twelve of those 20 programs. For instance, while G3 funding was sanctioned for both CIP 43.0103 (Criminal Justice/Law Enforcement Studies) and CIP 43.0107 (Criminal Justice/Police Science), VCCS offered programs only under the former CIP. Table 1 presents the twelve G3-eligible programs that VCCS did not offer in 2022–23 alongside the closely related programs that were offered that year.

Table 1
VCCS Programming Closely Related to Non-Active G3-Eligible Programs in AY 2022–23²

G3 CIP (No Enrollment)		Related G3 CIP (With Enrollment)	
15.0305	Telecommunications Technology/Technician	15.0303	Electrical, Electronic, and Communications Engineering Technology/Technician
15.1301	Drafting and Design Technology/Technician, General	15.1302	CAD/CADD Drafting and/or Design Technology/Technician
		15.1303	Architectural Drafting and Architectural CAD/CADD
43.0106	Forensic Science and Technology	43.0103	Criminal Justice/Law Enforcement Administration
		43.0102	Corrections
		43.0104	Criminal Justice/Safety Studies
43.0107	Criminal Justice/ Police Science	43.0103	Criminal Justice/Law Enforcement Administration
		43.0102	Corrections
		43.0104	Criminal Justice/Safety Studies
48.0501	Machine Tool Technology/ Machinist	48.0508	Welding Technology/Welder
		48.0599	Precision Metal Working, Other
51.0603	Dental Laboratory Technology/ Technician	51.0601	Dental Assisting/Assistant
		51.060	Dental Hygiene/Hygienist
51.0808	Veterinary/Animal Health Technology/Technician and Veterinary Assistant	51.0801	Medical/Clinical Assistant
		51.0806	Physical Therapy Assistant
		51.0803	Occupational Therapist Assistant

²Relationships between non-active and active fields are determined by shared four-digit CIP codes.

Table 1, ContinuedVCCS Programming Closely Related to Non-Active G3-Eligible Programs in AY 2022–23²

G3 CIP (No Enrollment)		Related G3 CIP (With Enrollment)	
51.0912	Physician Associate/Assistant	51.0904	Emergency Medical Technology/Technician (EMT Paramedic)
		51.0908	Respiratory Care Therapy/Therapist
		51.0911	Radiologic Technology/Science - Radiographer
		51.0999	Allied Health Diagnostic, Intervention, and Treatment Professions, Other
		51.0909	Surgical Technology/Technologist
		51.0910	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician
		51.0907	Medical Radiologic Technology/ Science - Radiation Therapist
51.1005	Clinical Laboratory Science/ Medical Technology/ Technologist	51.1004	Clinical/Medical Laboratory Technician
51.1504	Community Health Services/ Liaison/Counseling	51.1599	Mental and Social Health Services and Allied Professions, Other
		51.1501	Substance Abuse/Addiction Counseling
51.1508	Mental Health Counseling/ Counselor	51.1599	Mental and Social Health Services and Allied Professions, Other
		51.1501	Substance Abuse/Addiction Counseling
51.3899	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	51.3801	Registered Nursing/Registered Nurse

Table 2 below displays G3-funded enrollment in VCCS institutions by CIP Code Family and program type.

Table 2

Total G3 Enrollment Across VCCS Colleges, by Two-Digit CIP Series and Credit/Noncredit Program Type, in AY 2022–23

Two-Digit CIP Series		Associate	Noncredit	Sub-associate	Grand Total
01	Agricultural/Animal/Plant/Veterinary Science and Related Fields	93	0	18	111
11	Computer and Information Sciences and Support Services	2,000	656	142	2,798
13	Education	1	0	8	9

²Relationships between non-active and active fields are determined by shared four-digit CIP codes.

Table 2, Continued

Total G3 Enrollment Across VCCS Colleges, by Two-Digit CIP Series and Credit/Noncredit Program Type, in AY 2022–23

Two-Digit CIP Series	Associate	Noncredit	Sub-associate	Grand Total
15 Engineering/Engineering-Related Technologies/ Technicians	425	77	161	663
19 Family and Consumer Sciences/Human Sciences	473	0	87	560
36 Leisure and Recreational Activities	0	0	0	0
41 Science Technologies/Technicians	5	0	1	6
43 Homeland Security, Law Enforcement, Firefighting and Related Protective Services	468	19	24	511
46 Construction Trades	38	501	82	621
47 Mechanic and Repair Technologies/Technicians	321	257	224	802
48 Precision Production	37	372	259	668
51 Health Professions and Related Programs	2,083	2,275	1,780	6,138
52 Business, Management, Marketing, and Related Support Services	157	59	0	216
Total	6,101	4,216	2,786	13,103

Table 3 presents the number of G3-funded award earners across all VCCS institutions in AY 2022–23, by two-digit CIP Series and program type

Table 3

Total G3 Award Earners Across VCCS Colleges, by Two-Digit CIP Series and Credit/Noncredit Program Type, in AY 2022–23

Two-Digit CIP Series	Associate	Noncredit	Sub-associate	Grand Total
01 Agricultural/Animal/Plant/Veterinary Science and Related Fields	23	0	0	23
11 Computer and Information Sciences and Support Services	308	139	117	564
13 Education	0	0	47	47
14 Engineering	0	1	0	1
15 Engineering/Engineering-Related Technologies/ Technicians	75	62	245	382
19 Family and Consumer Sciences/Human Sciences	60	0	188	248

Table 3, Continued

Total G3 Award Earners Across VCCS Colleges, by Two-Digit CIP Series and Credit/Noncredit Program Type, in AY 2022–23

Two-Digit CIP Series		Associate	Noncredit	Sub-associate	Grand Total
36	Leisure and Recreational Activities	0	5	0	5
43	Homeland Security, Law Enforcement, Firefighting and Re-lated Protective Services	58	4	76	138
46	Construction Trades	10	314	136	460
47	Mechanic and Repair Technologies/Technicians	46	212	229	487
48	Precision Production	11	336	205	552
49	Transportation and Materials Moving	0	84	0	84
51	Health Professions and Related Programs	513	798	423	1,734
52	Business, Management, Marketing, and Related Support Services	21	41	8	70
Total		1,125	1,996	1,674	4,795

Students Enrolled in CIPs Not Specified in G3 Legislation but Receiving G3 Funding

Approximately 6% of students receiving G3 last-dollar financial aid were enrolled in a program not among the 92 CIPs listed in the authorizing legislation. Three factors contribute to this discrepancy.

First, the legislation referenced the 2010 NCES CIP taxonomy rather than the CIP numbers in the updated taxonomy released in 2020. In the new version, substantially similar programs were sometimes assigned a new six-digit code. For example, the CIP code in G3 legislation named 51.0808 Veterinary/Animal Health Technology/Technician and Veterinary Assistant in 2010 changed to 01.8301 in the newer 2020 CIP system.

Second, students pursuing Workforce Credential Grants (also known as Fast Forward) were eligible to use G3 funding to cover their portion of tuition for short-term noncredit certificate programs. In some cases, the CIP codes assigned to these short-term credential programs, while similar in focus to an eligible CIP, were not explicitly referenced in legislation.

Finally, some students pursue multiple degrees concurrently. If a student receives G3-based financial aid for an eligible field of study, their enrollment in other fields of study is also reported. Table 4 summarizes G3 financial aid awards granted to students enrolled in programs that are not listed in the authorizing legislation. Appendix provides a complete list of programs not listed in the authorizing legislation for which students received G3 funding.

Table 4

VCCS Students Receiving G3 Financial Aid in Programs Not Named in G3 Legislation, by G3-Eligible CIP Series, AY 2022–23

Two-Digit CIP Series		Total G3 Recipients	Total G3 Award Earners	G3 Recipients (%)	G3 Award Earners (%)
01	Agricultural/Animal/Plant/Veterinary Science and Related Fields	111	23	100	100
11	Computer and Information Sciences and Support Services	159	42	6	7
13	Education	8	22	89	47
14	Engineering	0	1	0	100
15	Engineering/Engineering-Related Technologies/Technicians	85	53	13	14
19	Family and Consumer Sciences/Human Sciences	0	7	0	3
36	Leisure and Recreational Activities	0	5	0	100
43	Homeland Security, Law Enforcement, Firefighting and Related Protective Services	10	4	2	3
46	Construction Trades	123	88	20	19
47	Mechanic and Repair Technologies/Technicians	73	65	9	13
48	Precision Production	2	2	0	0
49	Transportation and Materials Moving	0	84	0	100
51	Health Professions and Related Programs	112	23	2	1
52	Business, Management, Marketing, and Related Support Services	105	43	49	61
Total		788	462	6	10

Regional Variation in G3

Students throughout the state benefited from G3. While more populous regions, such as Hampton Roads, Northern Virginia, and the Capital Region, had the highest absolute participation in G3 financial aid, Southwest and Southside Virginia had the highest rates of G3 participation among students enrolled in eligible programs. Table 5 presents G3 enrollment and awards in each of the nine GO Virginia regions. To enable comparison with overall enrollment and awards at these institutions, the sample is restricted to credit-bearing programs.

Table 5

G3 Enrollment and Award Earners in For-Credit Programs at VCCS Institutions, AY 2022–23, by GO Virginia Region

GO Virginia Region	G3 Enrollment	G3 Award Earners	Enrollment Receiving G3 Aid (%)	Award Earners Receiving G3 Aid (%)
Region 1 (Southwest)	1,345	629	23	25
Region 2 (West)	1,260	472	12	13
Region 3 (Southside)	761	286	11	15
Region 4 (Capital Region)	1,103	272	9	9
Region 5 (Hampton Roads)	1,524	422	8	9
Region 6 (Middle Peninsula/Northern Neck)	124	28	6	4
Region 7 (Northern Virginia)	1,632	398	5	5
Region 8 (Shenandoah Valley)	406	116	5	5
Region 9 (Piedmont)	732	176	7	7
Total	8,887	2,799	8	10

Similarly, while enrollment was highest in absolute terms at larger institutions in populous regions, in general, higher proportions of students benefited from G3 at schools serving predominately rural areas. Mountain Empire Community College (Wise County) had the highest utilization rate (31%), followed by Southwest Virginia Community College (Tazewell County) with 26%, and Danville Community College with 20%. Table 6 provides the breakdown of G3 enrollment and awards in for-credit programs by community college.

Table 6

G3 Enrollment and Awards in For-Credit Programs, AY2022–2023 by Community College

VCCS Institution	G3 Enrollment	G3 Award Earners	Enrollment Receiving G3 Aid (%)	Award Earners Receiving G3 Aid (%)
Blue Ridge Community College	250	63	6	7
Brightpoint Community College	542	103	10	7
Central Virginia Community College	228	62	6	5
Danville Community College	316	159	20	23
Eastern Shore Community College	56	22	13	13
Germanna Community College	522	122	8	7
J. Sargeant Reynolds Community College	561	169	9	10
Laurel Ridge Community College	156	53	4	4
Mountain Empire Community College	420	222	31	29

Table 6, Continued

G3 Enrollment and Awards in For-Credit Programs, AY2022–2023 by Community College

VCCS Institution	G3 Enrollment	G3 Award Earners	Enrollment Receiving G3 Aid (%)	Award Earners Receiving G3 Aid (%)
Mountain Gateway Community College	99	28	15	8
New River Community College	376	202	19	23
Northern Virginia Community College	1,632	398	5	5
Patrick & Henry Community College	232	86	12	34
Paul D. Camp Community College	84	28	12	12
Piedmont Virginia Community College	210	54	6	7
Rappahannock Community College	124	28	6	4
Southside Virginia Community College	213	41	6	4
Southwest Virginia Community College	440	116	26	20
Tidewater Community College	1,147	332	9	9
Virginia Highlands Community College	281	147	19	23
Virginia Peninsula Community College	237	40	5	4
Virginia Western Community College	557	180	13	16
Wytheville Community College	204	144	16	26
Total	8,887	2,799	8	10

Summary

Summary

Based on the analysis of VCCS outcomes data, this supplement supports the conclusions and recommendations made in VOEE's March 2023 report. The analysis reveals that out of the 92 six-digit CIPs mentioned in the G3 legislation, 20 (22%) did not have active programming available for enrollment by students in the academic year 2022–23. However, it is important to note that other education programs closely related in topic to these G3 CIPs were offered.

Considering the intention of the G3 legislation to support key areas of job demand that align with the community college labor market, it may be more effective to adopt a broader definition within the CIP taxonomy to determine funding eligibility under the G3 legislation. Currently, G3 requires enrollments to match six-digit-level CIPs to qualify for program eligibility. However, given that many fields of study are similar and often lead to the same occupations, it might be more practical to adopt the four-digit CIP series to specify G3 program eligibility. This approach would acknowledge the broader relationship between education and training programs and their aligned occupations in the labor market.

As a last-dollar financial aid assistance program, G3 exists as one of the many variations of funding-assistance programs found in the United States that support students' access to higher education. This addendum, along with the larger report released by VOEE in March 2023, is intended to contribute to further analysis and discussion among policymakers and educators regarding how Virginia may best invest and support its residents in accessing educational programming aligned to the Commonwealth's future workforce needs.

Appendix

Appendix

Appendix

G3-Funded Enrollment and Awards Given in Programs (CIP) Not Listed in Authorizing Legislation

CIP Code Family	G3 Enrollment	G3 Awards
01 Agricultural/Animal/Plant/Veterinary Science And Related Fields	111	23
01.8301 Veterinary/Animal Health Technology/Technician and Veterinary Assistant	111	23
11 Computer and Information Sciences And Support Services	159	42
11.0202 Computer Programming, Specific Applications	22	1
11.0203 Computer Programming, Vendor/Product Certification	14	6
11.0902 Cloud Computing	99	26
11.1005 Information Technology Project Management	5	5
11.1099 Computer/Information Technology Services Administration and Management, Other	17	3
11.9999 Computer and Information Sciences and Support Services, Other	2	1
13 Education	8	22
13.1210 Early Childhood Education and Teaching	8	22
14 Engineering	0	1
14.1901 Mechanical Engineering	0	1
15 Engineering/Engineering-Related Technologies/Technicians	85	53
15.0001 Applied Engineering Technologies/Technicians	23	3
15.0407 Mechatronics, Robotics, and Automation Engineering Technology/Technician	1	0
15.1001 Construction Engineering Technology/Technician	6	0
15.1701 Energy Systems Technology/Technician	55	50
19 Family and Consumer Sciences/Human Sciences	0	7
19.0799 Human Development, Family Studies, and Related Services, Other	0	7
36 Leisure and Recreational Activities	0	5
36.0207 Remote Aircraft Pilot (Personal)	0	5

CIP Code Family	G3 Enrollment	G3 Awards
43 Homeland Security, Law Enforcement, Firefighting and Related Protective Services	10	4
43.0116 Cyber/Computer Forensics and Counterterrorism	1	0
43.0199 Corrections and Criminal Justice, Other	9	4
46 Construction Trades	123	88
46.0101 Mason/Masonry	1	0
46.0201 Carpentry/Carpenter	13	3
46.0301 Electrical and Power Transmission Installation/Installer, General	75	65
46.0401 Building/Property Maintenance	18	7
46.0412 Building/Construction Site Management/Manager	8	7
46.0503 Plumbing Technology/Plumber	8	6
47 Mechanic and Repair Technologies/Technicians	73	65
47.0302 Heavy Equipment Maintenance Technology/Technician	34	34
47.0303 Industrial Mechanics and Maintenance Technology/Technician	10	5
47.0616 Marine Maintenance/Fitter and Ship Repair Technology/Technician	27	19
47.0699 Vehicle Maintenance and Repair Technologies/Technicians, Other	0	6
47.0703 Solar Energy System Installation and Repair Technology/Technician	2	1
48 Precision Production	2	2
48.0506 Sheet Metal Technology/Sheetworking	2	2
49 Transportation and Materials Moving	0	84
49.0202 Construction/Heavy Equipment/Earthmoving Equipment Operation	0	38
49.0205 Truck and Bus Driver/Commercial Vehicle Operator and Instructor	0	27
49.0207 Flagging and Traffic Control	0	19
51 Health Professions and Related Programs	112	23
51.0710 Medical Office Assistant/Specialist	2	2
51.0902 Electrocardiograph Technology/Technician	66	12
51.1012 Sterile Processing Technology/Technician	4	0
51.2006 Clinical and Industrial Drug Development	1	0
51.2603 Medication Aide	37	8
51.9999 Health Professions and Related Clinical Sciences, Other	2	1

CIP Code Family	G3 Enrollment	G3 Awards
52 Business, Management, Marketing, And Related Support Services	105	43
52.0201 Business Administration and Management, General	1	0
52.0203 Logistics, Materials, and Supply Chain Management	27	36
52.0207 Customer Service Management	1	0
52.0299 Business Administration, Management and Operations, Other	3	0
52.1001 Human Resources Management/Personnel Administration, General	3	1
52.1005 Human Resources Development	28	4
52.2001 Construction Management, General	42	2
Total	788	462

