RIT

National Technical Institute for the Deaf

2024 Annual REPORT

rit.edu/ntid

2024 Annual Report

National Technical
Institute for the Deaf

Note of Explanation

This Annual Report notes activities and accomplishments throughout Fiscal Year 2024 (October 1, 2023-September 30, 2024), corresponding primarily to Academic Year 2023-2024. References to Fiscal Year 2025 correspond to characteristics and accomplishments as of fall semester Academic Year 2024-2025.

Throughout the report, RIT and NTID alumni are indicated by their graduation years appearing after their names. We apologize for any omissions.

NTID FY 2024 Annual Report Contents

Contents (continued)

Contents (continued)

December 20, 2024

The Honorable Miguel Cardona
Secretary of Education
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, DC 20202

Dear Secretary Cardona:

We are pleased to submit the following report, the last such report of our respective careers prior to retirement, to fulfill the requirement of the Education of the Deaf Act that the National Technical Institute for the Deaf (NTID), a college of Rochester Institute of Technology (RIT), "… shall prepare and submit an annual report to the Secretary…"

As presidents of RIT and NTID, we have been guided by the wisdom and intentions of NTID's mission:

> *To provide deaf and hard-of-hearing students with outstanding state-of-the-art technical and professional education programs, complemented by a strong liberal arts and sciences curriculum, that prepare them to live and work in the mainstream of a rapidly changing global community and enhance their lifelong learning. Secondarily, NTID prepares professionals to work in fields related to deafness; undertakes a program of applied research designed to enhance the social, economic and educational accommodation of deaf people; and shares its knowledge and expertise through outreach and other information dissemination programs.*

During President Buckley's 15 years as NTID's first alumnus president, $51 million was secured for NTID through the university's fundraising campaign, *Transforming RIT: The Campaign for Greatness;* the NTID Regional STEM Center was established, expanding STEM outreach activities to prepare deaf and hard-of-hearing students nationwide for STEM career success; the Deaf Health Care and Biomedical Science Hub was established, designed to increase deaf representation in health care and scientific fields; Sebastian and Lenore Rosica Hall was built, a state-of-the-art facility to foster innovation, entrepreneurship, and original research among deaf and hard-of-hearing students and their hearing peers; and RIT's first deaf students received doctoral degrees.

During President Munson's eight years at RIT, $1 billion-plus was generated for the blended *Transforming RIT* campaign; a performing arts program was launched that now includes more than 2,000 scholars; enrollment increased, including growth at international campuses in Croatia, Dubai, Kosovo, and China; and major facility projects were undertaken such as the ESL Global Cybersecurity Institute, the SHED (Student Hall for Exploration and Development), the Saunders College of Business expansion, athletic facilities including Tiger Stadium, a research building to be completed in 2025, and a Music Performance Theater, scheduled to open in 2026.

In FY 2024, we are pleased to report that, once again, NTID students had persistence and graduation rates higher than national rates for all students, hearing and otherwise, at two- and four-year colleges and had a 95% employment rate. As of this fall semester, our students can now enroll in new Ph.D. programs in cognitive science (a program offered jointly by NTID and five other RIT colleges) and physics, as well as an enhanced American Sign Language/Deaf Cultural Studies minor and immersion.

As this is our final report, we would like to take this opportunity to thank the Department for its guidance and oversight of RIT/NTID during our leadership. We have been honored to serve RIT/NTID, its students, and the greater community, and will be excited to see how the next NTID and RIT presidents help deaf, hard-of-hearing, and hearing graduates exceed expectations. More information about NTID's FY 2024 accomplishments are summarized in this report, which can also be found online here: rit.edu/ntid/about/media#annual-report.

With warm regards and appreciation,

Gerard J Buckley

David C. Munson, Jr.   Gerard J. Buckley '78
President   President, NTID
                                                     Vice President and Dean, RIT

Cover Photos

NTID's mission to provide educational experiences that allow deaf and hard-of-hearing students to blend technology, the arts, and extra-curricular activities promotes opportunities for growth within and beyond the classroom, and prepares graduates for success in their careers and in life.

The primary mission of the National Technical Institute for the Deaf is to provide deaf and hard-of-hearing students with outstanding state-of-the-art technical and professional education programs, complemented by a strong arts and sciences curriculum, that prepare them to live and work in the mainstream of a rapidly changing global community and enhance their lifelong learning.

Secondarily, NTID prepares professionals to work in fields related to deafness; undertakes a program of applied research designed to enhance the social, economic and educational accommodation of deaf people; and shares its knowledge and expertise through outreach and other information dissemination programs.

NTID by the Numbers

The National Technical Institute for the Deaf has grown exponentially since enrolling its first class in 1968. Numbers don't tell the whole story, but they do provide a glimpse of what NTID looks like today.

Student Enrollment

1,176 TOTAL ENROLLMENT

BREAKDOWN BY GEOGRAPHIC REGION:

97% U.S.

- **17%** West
- **12%** Midwest
- **49%** Northeast
- **22%** South

3% International
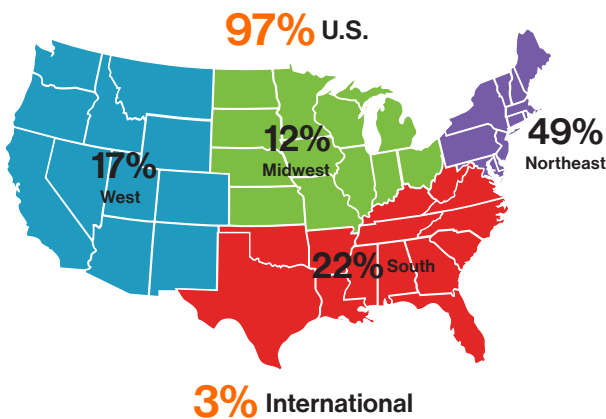
BREAKDOWN BY GENDER:

- **45%** MALE
- **55%** FEMALE
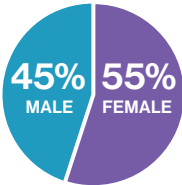
NEARLY **11,000** ALUMNI

37% of RIT/NTID students are eligible for Pell Grants

Growing Diversity

49% of RIT/NTID deaf and hard-of-hearing students are from a minority background

Academics

- **17%** Career-Focused Associate Degree Programs
- **16%** Associate+Bachelor's Degree Programs
- **38%** Bachelor's Degree Programs
- **15%** Graduate Degree Programs
- **13%** ASL-English Interpretation
- **1%** Career Exploration Studies

Employment/Earnings After College

178 STUDENTS COMPLETED A CO-OP LAST YEAR

New RIT/NTID grads are ready to succeed

95% of students who sought jobs after graduation found one within a year

New RIT/NTID alumni thrive in all economic sectors

- Government **9%**
- Education & Non-Profit **13%**
- Business & Industry **78%**
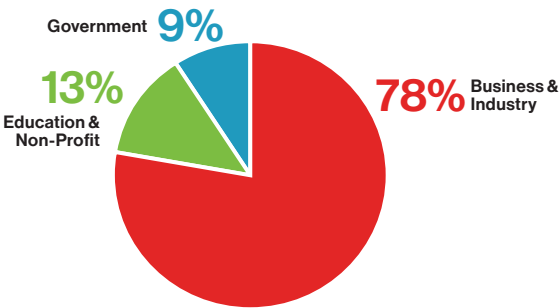
Employers include:

Fidelity Investments, Microsoft, PNC Financial Services Group, Kimley-Horn, General Dynamics Mission Systems, Defense Finance and Accounting Service, Citi, BNY Mellon, Amazon

RIT/NTID graduates are competitive in the marketplace

RIT/NTID associate degree graduates earn

95% more than deaf and hard-of-hearing graduates from other postsecondary institutions*.

RIT/NTID bachelor's degree graduates earn

178% more than deaf and hard-of-hearing graduates from other postsecondary institutions*.

*median salary at age 50 compared to average
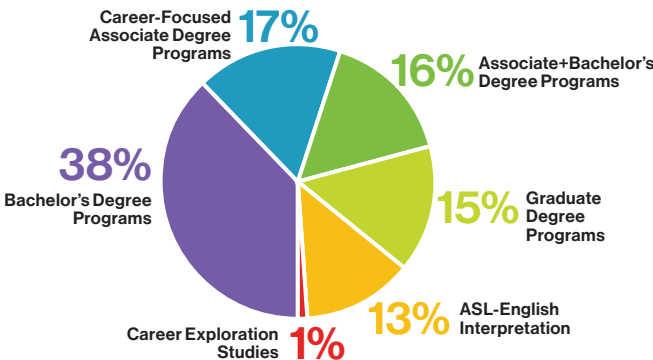
Student Access Services

Hours provided

	In Classroom	Outside Classroom
Interpreting	89,299	43,415
Captioning	24,944	1,646
Notetaking	48,330	

Annual Highlights

Noteworthy accomplishments and statistics for the past year include the following:

- NTID's most recent employment rate for deaf and hard-of-hearing graduates in 2023 is 95%. The average employment rate over the past five years is 95%.
- NTID's first-year persistence rates and graduation rates for both sub-baccalaureate students and baccalaureate students were higher than national rates for two- and four-year colleges.
- In February 2024, RIT was named one of 10 National Institutes of Health (NIH) Institutional Excellence in Diversity, Equity, Inclusion, and Accessibility in Biomedical and Behavioral Research Prize Competition award winners, due to the Undergraduate Research Training Initiative for Scientific Enhancement (U-RISE) program at NTID and the Inclusive Excellence program at RIT's College of Science. NIH awarded RIT $100,000 to continue efforts to create cultures of inclusion in the biomedical and behavioral research fields.
- In April 2024, RIT President David Munson announced his plan to retire after eight years leading RIT, with his last day in office as June 30, 2025.
- In May 2024, Assistant Secretary of the Office of Special Education and Rehabilitative Services, U.S. Department of Education, Glenna Wright-Gallo toured NTID's campus and gave the keynote commencement speech.
- On May 31, 2024, NTID hosted the Greater Rochester Deaf and Hard-of-Hearing Emergency Preparedness and Response Services Summit focused on learning from the tragic shooting of deaf individuals in Lewiston, Maine, identifying the components of inclusive emergency preparedness planning, sharing successful emergency preparedness practices on the RIT/NTID campus, and highlighting the work being done by RIT/NTID as a result of the NSF CIVIC grant "Bridging the Gap between Essential Emergency Resources and Services and the Deaf and Hard of Hearing Community in Monroe County, NY: A Geospatial-Visual Approach." It was attended by U.S. Representative Joe Morelle, Monroe County Executive Adam Bello, Monroe County Sheriff Todd Baxter, and more than 70 deaf experts and advocates, policymakers, government officials, and representatives of emergency services, including fire, EMS, and local sheriff's office.
- In June 2024, New York State awarded RIT a $1.5 million grant through the Higher Education Capital Matching Grant Program to enhance the medium voltage electrical infrastructure serving the living and learning environments for RIT and NTID students. The upgrades will increase RIT's ability to expand its physical plant and technological capabilities, supporting new academic programs, research endeavors, and addressing the evolving needs of students.
- In August 2024, RIT began offering two new doctoral degrees in cognitive science and physics. The cognitive science Ph.D. program is jointly delivered by faculty from NTID and five other RIT colleges.
- In August 2024, the academic minor and immersion in American Sign Language/Deaf Cultural Studies was expanded to include 15 courses.
- In 2024, RIT trustee and alumnus Andrew Jacobson '90, '96, pledged $1 million in support of NTID via the Andrew Jacobson Endowed Scholarship, the largest commitment by an RIT/NTID alumnus in NTID history.
- In fall 2024, NTID began celebrating 50 Years of Performing Arts at NTID, including the Oct. 18 opening of a related Dyer Arts Gallery exhibit.
- In November 2024, NTID President Gerard Buckley '78 announced his plan to retire after 15 years leading NTID, with his last day in office as July 18, 2025.

Executive Summary

New Fall Enrollment*	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Undergraduate					
ASL-English Interpretation	48	48	41	42	45
Community Development and Inclusive Leadership	N/A	N/A	0	1	1
NTID Associate Programs	149	153	124	152	152
Other RIT Colleges	71	89	96	76	88
Non-Degree	0	3	3	0	0
Graduate					
MS in Secondary Education	22	28	38	36	38
Other RIT Colleges	28	27	14	31	26
Non-Degree	0	1	0	0	1
Total New Enrollment	**318**	**349**	**316**	**338**	**351**
Total New Deaf and Hard-of-Hearing Enrollment	**261**	**291**	**254**	**278**	**296**
Overall Enrollment					
Undergraduate					
ASL-English Interpretation	170	168	144	144	152
Community Development and Inclusive Leadership	N/A	N/A	3	8	7
NTID Associate Programs	396	400	380	367	404
Other RIT Colleges	421	455	465	446	437
Non-Degree	3	3	3	1	0
Graduate					
MS in Health Care Interpretation	11	13	12	11	10
MS in Secondary Education	34	56	72	82	84
Other RIT Colleges	65	70	56	70	81
Non-Degree	0	1	0	0	1
Total Enrollment	**1,101**	**1,166**	**1,135**	**1,129**	**1,176**
Total Deaf and Hard-of-Hearing Enrollment	**908**	**970**	**946**	**930**	**982**

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*   New students are those who have not previously attended RIT or are attending as a graduate student for the first time.

Executive Summary (continued)

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Withdrawn (All Students)	15%	17%	17%	16%	14%
Degrees Granted					
Total	319	235	275	277	294
Degree Level					
Certificate	1	1	0	1	2
Associate (AOS)	28	18	17	13	14
Associate (AS/AAS)	82	54	54	56	66
Bachelor's (Interpreting)	23	30	44	29	32
Bachelor's	152	96	109	113	115
Advanced Certificate		1	3	1	4
Master's	15	24	25	26	24
Master's (MS Health Care Interpretation)	8	5	4	8	4
Master's (MSSE)	10	6	19	28	33
Doctorate (Ph.D.)	0	0	0	2	0
Post-Graduation Employment					
Post-Graduation Employment	124	92	112	98	N/A*
Post-Graduation Employment Rate	95%	96%	96%	95%	N/A*
By Sector of the Economy					
Business and Industry	72%	67%	67%	78%	N/A*
Education/Non-Profit	21%	25%	24%	13%	N/A*
Government	7%	8%	9%	9%	N/A*
Cooperative Work Experiences	181	218	209	204	178
Access/Support Services					
Notetaking Hours	40,475	30,263	39,989	43,522	48,330
Tutoring Hours	12,025	10,993	10,634	8,954	7,904
Interpreting Hours	118,240	117,831	132,176	124,564	132,714
Real-Time Captioning Hours	21,856	27,744	32,317	27,634	26,590

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* Post-graduation employment numbers reflect status as of one year following graduation; employment numbers for September 1, 2023 through August 31, 2024 graduates will be reported next year.

Executive Summary (continued)

Outreach (Number of External Participants)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Advanced Tech Careers	N/A	N/A	N/A	N/A	15
Career Exploration Series	N/A	N/A	N/A	1,040	2,619
Digital Arts, Film and Animation	1	37	4	13	10
Explore Your Future	136	137	117	149	108
Financial Wizards	N/A	N/A	N/A	N/A	14
Health Care Careers Exploration Program	N/A	N/A	N/A	14	18
Math Competition	N/A	74	107	106	163
NTID Co-op and Career Center	163	1,462	479	506	994
NTID Regional STEM Center	5,122	6,473	9,259	12,164	18,432
Project Fast Forward	306	196	252	274	307
SpiRIT Writing Contest	16	12	5	33	14
STEM Days	N/A	N/A	N/A	344	448
STEM Trivia	N/A	N/A	N/A	47	10
Tech Tigers	N/A	N/A	48	56	55
Tiger Gaming League	N/A	N/A	N/A	N/A	66
Tiger Science Challenge	N/A	N/A	N/A	N/A	309
Virtual Science Fair	N/A	N/A	N/A	236	N/A

Financial Aid (Domestic Students)

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Grant-in-Aid	$1,660,043	$2,076,082	$2,199,614	$2,270,865	$1,605,242
Vocational Rehabilitation	8,409,863	7,679,659	7,375,278	7,978,755	9,540,793
Pell Grants	2,353,799	2,215,865	2,479,200	2,515,133	2,599,166
State Grants	511,115	522,350	517,474	521,881	273,024
Federal Loans	2,936,663	2,417,667	2,814,436	2,569,472	2,146,297
Alternative Loans	0	0	0	0	300,339
Scholarships and Other	4,848,736	5,745,909	7,427,511	8,588,473	9,837,105
Total Financial Aid	**$20,720,219**	**$20,657,532**	**$22,813,513**	**$24,444,579**	**$26,301,966**
Average Aid per Domestic Student (Excluding Loans)*	**$16,330**	**$17,031**	**$17,667**	**$19,905**	**$20,853**

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* Total financial aid, less loans, divided by domestic student enrollment.

Executive Summary (continued)

Domestic Student Rates*	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Tuition	$17,814	$18,330	$18,926	$19,778	$20,550
Room	8,140	8,392	8,728	9,032	9,366
Board	5,836	6,040	6,250	6,484	6,776
Fees	676	726	798	880	950
Total	**$32,466**	**$33,488**	**$34,702**	**$36,174**	**$37,642**
Fundraising Activity					
Cash to Endowment and Restricted Funds	$1,165,293	$1,346,832	$1,335,420	$1,436,585	**
Equipment and Software	$65,599	$140,990	$0	$35,485	**
Federal Funds Matched***	$285,201	$354,669	$405,767	$360,608	**

First-year students march from the dormitories to Gordon Field House during RIT's Tiger Walk, a hallmark of New Student Convocation.

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* Per the Education of the Deaf Act, international students pay differing tuition rates, depending on whether they are from a developing or developed country. Their charges for room, board, and fees are the same as for domestic students.
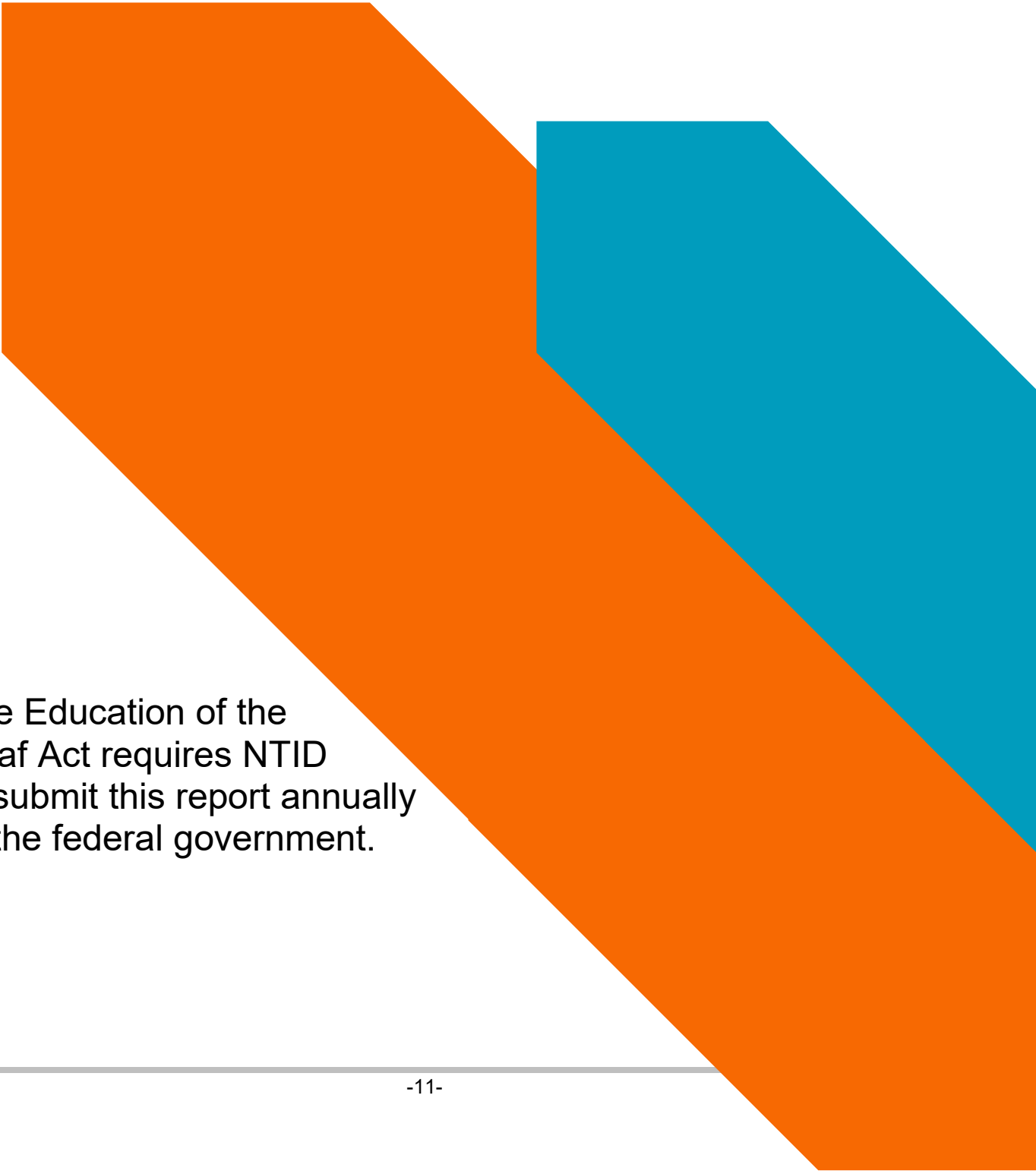
** Information not yet available.

*** Any monies matched must be funded through operating funds efficiencies.

The Education of the Deaf Act

The Education of the Deaf Act requires NTID to submit this report annually to the federal government.

Reporting Requirements of the Education of the Deaf Act and the Agreement with RIT

This section includes, verbatim, the section of the Education of the Deaf Act (EDA) that applies to reporting requirements for the National Technical Institute for the Deaf. The material below in brackets provides cross-references, indicating sections of this report that reflect NTID compliance with these EDA provisions. In addition, reporting on inventions is included below based on a requirement of the Agreement with RIT.

NOTE: Where "…" appear, sections of the EDA that do not apply to NTID have been removed.

Reports for the EDA

… the Board of Trustees or other governing body of the institution of higher education with which the Secretary has an agreement [RIT] under section 4332 of this title shall prepare and submit an annual report to the Secretary, and to the Committee on Education and Labor of the House of Representatives and the Committee on Labor and Human Resources of the Senate, not later than 100 days after the end of each fiscal year, which shall include the following: [This *Annual Report* meets this requirement.]

(1) The number of students during the preceding academic year who enrolled and whether these were first-time enrollments, who graduated, who found employment, or who left without completing a program of study, reported under each of the programs … of NTID. [Refer to the Executive Summary section.]

(2) For the preceding academic year, and to the extent possible, the following data on individuals who are deaf and from minority backgrounds and who are students (at all educational levels) or employees:

(A) The number of students enrolled full- and part-time. [Refer to the Academic Programs and Diversity and Inclusion sections.]

(B) The number of these students who completed or graduated from each of the educational programs. [Refer to the Persistence, Graduation, and Employment and Diversity and Inclusion sections.]

(C) The disposition of these students upon graduation/completion on the date that is one year after the date of graduation or completion of programs at NTID … in comparison to students from non-minority backgrounds. [Refer to the Persistence, Graduation, and Employment and Diversity and Inclusion sections.]

(D) The number of students needing and receiving support services (such as tutoring and counseling) at all educational levels. [Refer to the Student Support Services section.]

(E) The number of recruitment activities by type and location for all educational levels. [Refer to the Outreach section of the Executive Summary.]

(F) Employment openings/vacancies and grade level/type of job and number of these individuals that applied and that were hired… [Refer to the Diversity and Inclusion section.]

(3) (A) A summary of the annual audited financial statements and auditor's report … as required under section 4353 of this title. [The audit of RIT is provided to the Secretary, as is a separate schedule for NTID.]

(B) A summary of the annual audited financial statements and auditor's report of NTID programs and activities of this title, and such supplementary schedules presenting financial information for NTID for the end of the federal fiscal year as determined by the Secretary. [The audit of RIT is provided to the Secretary, as is a separate schedule for NTID.]

Education of the Deaf Act (continued)

(4) For the preceding fiscal year, a statement showing the receipts of … NTID and from what federal sources, and a statement showing the expenditures … by function, activity, and administrative and academic unit. [Refer to the Results of Financial Operations section.]

(5) A statement showing the use of funds (both corpus and income) provided by the Federal Endowment Program under section 4357 of this title. [Refer to the External Funding Sources section.]

(6) A statement showing how such Endowment Program funds are invested, what the gains or losses (both realized and unrealized) on such investments were for the most recent fiscal year, and what changes were made in investments during that year. [Refer to the External Funding Sources section.]

(7) Such additional information as the Secretary may consider necessary. [NTID responds on a regular basis to requests for additional information from staff of the U.S. Department of Education.]

Agreement with RIT: Certification Regarding Inventions

The *Agreement for Establishment and Operation of the National Technical Institute for the Deaf Between the Secretary of Health, Education, and Welfare and Rochester Institute of Technology (RIT) (1966)* requires annual disclosure of any inventions developed during the year or a certification that no inventions were made during the applicable period. NTID hereby certifies that no new inventions were made during the year covered by this Annual Report.

Most recent inventions include:

Intellectual Property 2017-015-01 – Provisional Patent filed with U.S.P.T.O. for "Method for Measuring Sign Recognition Ability in Learners of American Sign Language (ASL) as a Second Language." Application date: July 18, 2017. IP Inventors named: Joseph Bochner, Vincent Samar, Wayne M. Garrison. Converted to non-provisional patent June, 2018.

Intellectual Property 2019-013-02 – Non-provisional Patent filed with U.S.P.T.O. for "Method and System to Enhance Telecommunication Relay System for People with Disability." Application date: February 14, 2020. IP Inventors named: Brian Trager '00, '05, Gary Behm '78, '81, Shareef Ali '15, '18, Mark Jeremy '96, '08, '18, Byron Behm. Published at USPTO, August 5, 2021.

Performance Indicators

Performance indicators, required by the Government Performance and Results Act, measure NTID's performance related to enrollment, persistence, graduation, and employment.

Performance Indicators

Performance indicators are critical elements of the Congressionally mandated Government Performance and Results Act (GPRA), which requires the Department of Education to measure the performance of all entities within its oversight receiving federal funds. There are four objectives, each with several measures to track performance.

Objective 1 of 4

Provide deaf, hard-of-hearing and hearing students in undergraduate and professional studies with outstanding state-of-the-art technical and professional education programs, complemented by a strong arts and sciences curriculum and supplemented with appropriate student support services.

Though not related directly to required performance indicators, the table below reports an overview of the total enrollment for the National Technical Institute for the Deaf (NTID):

Fiscal Year	Total Enrollment
2016	1,413
2017	1,300
2018	1,262
2019	1,182
2020	1,129
2021	1,101
2022	1,166
2023	1,135
2024	1,128
2025	1,175

Performance Indicators (continued)

Measure 1.1 of 3: The number of NTID-supported deaf and hard-of-hearing undergraduates (desired direction: increase)			
Fiscal Year	Target	Number	Status
2016	1,200	1,167	Made Progress From Prior Year
2017	1,200	1,078	Target Not Met
2018	1,200	1,025	Target Not Met
2019	1,045	955	Target Not Met
2020	1,045	890	Target Not Met
2021	1,045	820	Target Not Met
2022	1,045	858	Made Progress From Prior Year
2023	1,045	851	Target Not Met
2024	1,045	821	Target Not Met
2025	1,045	848	Made Progress From Prior Year

Source: National Technical Institute for the Deaf, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: Enrollment data does not include part-time students or non-degree-seeking students, with the exception of part-time students who are taking their final courses for completion of their degrees.

Target Context: In September 2011, the target for the number of undergraduates who are deaf and hard of hearing enrolled in NTID was increased from 1,045 students to 1,200 students, as NTID enrolled more than 1,200 undergraduate students in FY 2009, FY 2010 and FY 2011. For FY 2019, the target was decreased back to the original 1,045 to better reflect the recent enrollment contraction.

Explanation: Below is a table showing the number of undergraduate students who are deaf or hard of hearing who were enrolled in sub-baccalaureate programs at NTID and in baccalaureate programs at RIT.

Fiscal Year	Sub-Baccalaureate	Baccalaureate	Total
2016	624	543	1,167
2017	571	507	1,078
2018	505	520	1,025
2019	449	506	955
2020	420	470	890
2021	399	421	820
2022	403	455	858
2023	388	463	851
2024	366	455	821
2025	404	444	848

As seen in the above table, NTID experienced an increase in the undergraduate enrollment of students who are deaf and hard of hearing from 821 students during AY 2023-2024 (FY 2024) to 848 students in AY 2024-2025 (FY 2025).

Performance Indicators (continued)

	Measure 1.2 of 3: The number of students enrolled in NTID's ASL-English Interpretation program (desired direction: increase)		
Fiscal Year	**Target**	**Number**	**Status**
2016	160	151	Made Progress From Prior Year
2017	140	140	Target Met
2018	140	147	Target Surpassed
2019	140	148	Target Surpassed
2020	140	155	Target Surpassed
2021	140	170	Target Surpassed
2022	140	168	Target Surpassed
2023	140	144	Target Surpassed
2024	140	144	Target Surpassed
2025	140	152	Target Surpassed

Source: National Technical Institute for the Deaf, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: Enrollment data for students in the ASL-English Interpretation program does not include part-time students or non-degree-seeking students, with the exception of part-time students who are taking their final courses toward completion of their degrees.

Target Context: NTID has reported that the ASL-English Interpretation program receives more applicants than they are able to accept. NTID allowed this program to expand in FY 2009 to help meet the increasing demand for qualified interpreters. As a result of the expansion, the target increased to 120 students for FY 2011, and again to 140 students for FY 2012, and finally to 160 students for FY 2015. In FY 2017, the target was changed back to an overall enrollment goal of 140 students.

Explanation: The number of students currently enrolled in the program in FY 2025 (AY 2024-2025) is 152. This measure previously included Associate in Applied Science (AAS) degree students in ASL-English Interpretation, a now-closed degree program track. Between FY 2009 and FY 2016, just four AAS degree students were enrolled as they finished their degree requirements.

Performance Indicators (continued)

Measure 1.3 of 3: The number of students enrolled in NTID's Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE), Master of Science program in Health Care Interpretation (MSHCI) and deaf or hard-of-hearing students pursuing graduate degrees in other RIT colleges (desired direction: increase)

Fiscal Year	Target	Number	Status
2016	95	95	Target Met
2017	95	82	Target Not Met
2018	95	90	Made Progress From Prior Year
2019	95	79	Target Not Met
2020	95	92	Made Progress From Prior Year
2021	95	111	Target Surpassed
2022	95	140	Target Surpassed
2023	95	140	Target Surpassed
2024	95	163	Target Surpassed
2025	95	175	Target Surpassed

Source: National Technical Institute for the Deaf, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: Enrollment data does not include part-time students or non-degree-seeking students, with the exception of part-time students who are taking their final courses toward completion of their degrees.

Target Context: In the FY 2008 Performance Plan, the target for the number of students enrolled in NTID's MSSE program, as well as students pursuing graduate degrees in the other colleges of RIT, was reduced from 120 students to 105 students. The target was further reduced from 105 students to 95 students for FY 2012 and subsequent years.

Explanation: In FY 2025 (2024-2025 academic year), NTID had a total of 84 students in the MSSE program, 10 students in the Health Care Interpretation program, and 81 deaf and hard-of-hearing students in other RIT graduate programs. FY 2017 marked the first year where students enrolled in NTID's Master of Science in Health Care Interpretation were included.

Performance Indicators (continued)

Objective 2 of 4

Maximize the number of students successfully completing a program of study.

Measure 2.1 of 4: The percentage of first-time, full-time, degree-seeking sub-baccalaureate students who were in their first year of postsecondary enrollment in the previous year and who are enrolled in the current year (desired direction: increase)

Fiscal Year	Target	Percentage	Status
2015	70	75.1	Target Surpassed
2016	70	69.5	Target Not Met
2017	70	71.3	Target Surpassed
2018	75	63.9	Target Not Met
2019	75	65.1	Made Progress From Prior Year
2020	75	68.3	Made Progress From Prior Year
2021	75	70.2	Made Progress From Prior Year
2022	75	75.0	Target Met
2023	75	61.6	Target Not Met
2024	75	76.0	Target Surpassed

Source: Rochester Institute of Technology, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: In November 2024, NTID reported to the Department the FY 2024 persistence rate of its sub-baccalaureate students who returned from the 2023-2024 academic year to their second academic year in 2024-2025.

Target Context: In 2023, NTID learned from the Department that the target for the persistence rate of NTID's sub-baccalaureate students had changed from 70.0 to 75.0, beginning in 2018, but the change had not been included in Department communications. In November 2023, NTID changed the targets from 2018-2022 to reflect these changes and made any resulting status changes. Comparisons with IPEDS data for two-year institutions indicate that NTID's most recent persistence rate of 76.0% for sub-baccalaureate students are higher than the rates for these institutions. Two-year institutions have an average persistence rate of 62.9%.

Explanation: This measure was added to the FY 2008 Performance Plan and is consistent with the methodology used by IPEDS and other Department programs in measuring the persistence of postsecondary students. The persistence rate is the percentage of first-time, full-time, degree-seeking sub-baccalaureate students who were in their first year of enrollment in the previous year and who are enrolled in the current year.

Performance Indicators (continued)

Measure 2.2 of 4: The percentage of first-time, full-time, degree-seeking baccalaureate students who were in their first year of postsecondary enrollment in the previous year and are enrolled in the current year (desired direction: increase)			

Fiscal Year	Target	Percentage	Status
2015	85	93.0	Target Surpassed
2016	86	83.0	Target Not Met
2017	87	88.8	Target Surpassed
2018	90	80.7	Target Not Met
2019	90	93.3	Target Surpassed
2020	90	88.3	Target Not Met
2021	90	83.7	Target Not Met
2022	90	84.3	Made Progress From Prior Year
2023	90	89.8	Made Progress From Prior Year
2024	90	85.7	Target Not Met

Source: Rochester Institute of Technology, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: In November 2024, NTID reported to the Department the FY 2024 persistence rate of its baccalaureate students, including interpreter students, who returned from the 2023-2024 academic year to their second year in 2024-2025 academic year, along with a sub-set of disaggregated data on the persistence rates of baccalaureate students who are deaf and interpreter education students. (Prior to FY 2008, this measure did not include interpreter students.)

The following persistence rates were submitted to the Department by NTID:

	All students	**Deaf students**	**ASL-English Interpretation students**
FY 2015	93.0%	90.8%	100.0%
FY 2016	83.0%	81.3%	88.0%
FY 2017	88.8%	85.0%	100.0%
FY 2018	80.7%	81.5%	77.8%
FY 2019	93.3%	90.5%	100.0%
FY 2020	88.3%	84.4%	96.7%
FY 2021	83.7%	82.1%	88.0%
FY 2022	84.3%	84.8%	80.0%
FY 2023	89.8%	88.2%	95.7%
FY 2024	85.7%	81.7%	96.3%

Target Context: In 2023, NTID learned from the Department that the target for the persistence rate of NTID's baccalaureate students had changed from 87.0 to 90.0, beginning in 2018, but the change had not been included in Department communications. In November 2023, NTID changed the targets from 2018-2022 to reflect these changes and made any resulting status changes. Comparisons with IPEDS data for four-year institutions indicate that NTID's most recent persistence rate of 85.7% for baccalaureate students is higher than the rates for these institutions. Four-year institutions have an average persistence rate of 81.0%.

Performance Indicators (continued)

Explanation: This measure was added to the FY 2008 Performance Plan and is consistent with the methodology used by IPEDS and other Department programs in measuring the persistence of postsecondary students. The persistence rate is the percentage of first-time, full-time, degree-seeking baccalaureate students who were in their first year of enrollment in the previous year and who are enrolled in the current year.

Measure 2.3 of 4: The percentage of first-time, full-time, degree-seeking sub-baccalaureate students who graduate within 150% of the program-based length of time (desired direction: increase)			
Fiscal Year	**Target**	**Percentage**	**Status**
2015	37	39.2	Target Surpassed
2016	38	38.8	Target Surpassed
2017	39	36.9	Target Not Met
2018	40	37.7	Made Progress From Prior Year
2019	41	43.8	Target Surpassed
2020	41	53.2	Target Surpassed
2021	41	42.8	Target Surpassed
2022	41	44.4	Target Surpassed
2023	41	36.1	Target Not Met
2024	41	37.0	Made Progress From Prior Year

Source: Rochester Institute of Technology, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: In November 2024, NTID reported to the Department the FY 2024 percentage of its sub-baccalaureate students (those who were initially enrolled in the 2018-2019 academic year), who graduated within 150% of the program-based length of time.

Target Context: The target for the graduation rate of NTID's sub-baccalaureate students is 41%. Comparisons with IPEDS data for two-year institutions indicate that NTID's graduation rate of 37.0% for sub-baccalaureate students is higher than the rates for these institutions. Two-year institutions have an average graduation rate of 34.1%.

Explanation: This measure was added to the FY 2008 Performance Plan and is consistent with the methodology used by IPEDS and other Department programs to measure the graduation rate of postsecondary students. Program-based length of time refers to whether the stated program length for sub-baccalaureates is two or three years. The measure will allow the Department to obtain data that is comparable with what is being submitted to IPEDS by other institutions on graduation rates.

Performance Indicators (continued)

Measure 2.4 of 4: The percentage of first-time, full-time, degree-seeking baccalaureate students who graduate within 150% of the program-based length of time (desired direction: increase)			
Fiscal Year	**Target**	**Percentage**	**Status**
2015	64	76.2	Target Surpassed
2016	65	74.5	Target Surpassed
2017	65	65.6	Target Surpassed
2018	65	79.6	Target Surpassed
2019	76	80.6	Target Surpassed
2020	76	72.4	Target Not Met
2021	76	67.0	Target Not Met
2022	76	73.8	Made Progress From Prior Year
2023	76	63.9	Target Not Met
2024	76	77.5	Target Surpassed

Source: Rochester Institute of Technology, Registrar Office records

Frequency of Data Collection: Annual

Data Quality: In November 2024, NTID reported to the Department the FY 2024 percentage of its baccalaureate students (those who enrolled in the 2018-2019 academic year), including interpreter education students, who graduated within 150% of the program-based length of time, along with a sub-set of disaggregated data on the graduation rates of baccalaureate students who are deaf and interpreter education students.

The following graduation rates were submitted to the Department by NTID:

	All students	**Deaf students**	**ASL-English Interpretation students**
FY 2015	76.2%	69.2%	91.7%
FY 2016	74.5%	73.5%	84.2%
FY 2017	65.6%	56.5%	88.9%
FY 2018	79.6%	77.3%	87.0%
FY 2019	80.6%	78.7%	87.0%
FY 2020	72.4%	68.3%	85.0%
FY 2021	67.0%	66.7%	68.0%
FY 2022	73.8%	73.3%	75.0%
FY 2023	63.9%	61.5%	72.2%
FY 2024	77.5%	82.5%	65.4%

Target Context: In 2023, NTID learned from the Department that the target for the graduation rate of NTID's baccalaureate students had changed from 65.0 to 76.0, beginning in 2019, but the change had not been included in Department communications. In November 2023, NTID changed the targets from 2019-2022 to reflect these changes and made any resulting status changes. Comparisons with IPEDS data indicate that NTID's most recent baccalaureate student graduation rate of 77.5% compares favorably to those of other four-year institutions, which have an average graduation rate of 64.6%.

Performance Indicators (continued)

Explanation: This measure was added in the FY 2008 Performance Plan and is consistent with the methodology used by IPEDS and other Department programs to measure the graduation rate of baccalaureate postsecondary students who graduate within six years of entry. The measure will allow the Department to obtain data comparable with what is being submitted to IPEDS by other institutions.

Objective 3 of 4

Improve post-school outcomes.

The source of the data in these measures is a questionnaire NTID gives to its students who are nearing graduation and immediately after graduation. All graduates receive an email contact from NTID during the first semester after graduation, as well as follow-up letters and phone calls, with the goal of acquiring data for every student who has graduated within the previous year. Questions include the graduate's address, whether the graduate has found or is looking for employment, and whether the graduate is attending college or another postsecondary institution. If the graduate is employed, NTID requests information regarding the employment experience, including type of work, starting date, and salary.

NTID reports the employment rate for deaf and hard-of-hearing sub-baccalaureate and baccalaureate graduates one year after graduation, based on availability of valid data. In 2023, a total of 207 deaf and hard-of-hearing students graduated from NTID. Valid data existed one year later on 188 graduates. Of these 188 graduates, 98 students were employed (52%), 77 students were in higher education or training (41%) and 13 students were not employed or in higher education or training (7%). Of the 13 students not employed or in higher education or training, five were actively looking for work.

Category of Graduate	Count
Employed	98
Unemployed (Seeking Employment)	5
Not Seeking Employment	8
Education (Within RIT)	70
Education (Outside RIT)	7
Unknown	19
Total	207

Performance Indicators (continued)

Measure 3.1 of 3: The post-school rate of NTID graduates who are employed during their first year after graduation (desired direction: increase)			
Graduation Year	Target	Rate	Status
2014	50	55	Target Surpassed
2015	50	58	Target Surpassed
2016	50	49	Target Not Met
2017	50	53	Target Surpassed
2018	50	57	Target Surpassed
2019	50	52	Target Surpassed
2020	50	51	Target Surpassed
2021	50	54	Target Surpassed
2022	50	60	Target Surpassed
2023	50	52	Target Surpassed

Source: National Technical Institute for the Deaf, post-graduation employment records

Frequency of Data Collection: Annual

Target Context: The average employment rate of 2005, 2006, and 2007 graduates who were employed full-time within one year after graduation was 57%. In FY 2010, the Department proposed that the target for this measure in FY 2010 and FY 2011 be equal to this average. The target was revised downward by the Department to 50% for FY 2012 and subsequent years to be more consistent with the data submitted by NTID for FY 2009, 2010, and 2011. In FY 2012, it was also determined that the target percentages across all three categories (Measures 3.1, 3.2, and 3.3) would equal 100% of the alumni being tracked by NTID.

Explanation: Originally employment rates were calculated by NTID as the percentage of graduates who are employed among those who choose to pursue employment, following the Bureau of Labor Statistics methodology. In previous years, NTID reported, in comparison with the target of 95%, the following percentages of students employed who have chosen to pursue employment:

Graduation Year	Percentage
2014	94
2015	94
2016	94
2017	96
2018	95
2019	95
2020	95
2021	96
2022	96
2023	95

Performance Indicators (continued)

In FY 2006, the Department changed the methodology for calculating employment data, from the percentage of graduates who were employed among those seeking employment, to the percentage of graduates who are employed among all those who graduated from NTID.

Measure 3.2 of 3: The post-school rate of NTID graduates who are in advanced education or training during their first year after graduation (desired direction: increase)			
Graduation Year	**Target**	**Rate**	**Status**
2014	45	35	Made Progress From Prior Year
2015	45	31	Target Not Met
2016	45	42	Made Progress From Prior Year
2017	45	42	Target Not Met
2018	45	35	Target Not Met
2019	45	41	Made Progress From Prior Year
2020	45	40	Target Not Met
2021	45	41	Made Progress From Prior Year
2022	45	36	Target Not Met
2023	45	41	Made Progress From Prior Year

Source: National Technical Institute for the Deaf, post-graduation employment records

Frequency of Data Collection: Annual

Target Context: The average participation rate of 2005, 2006, and 2007 graduates who were in advanced education or training full-time within one year after graduation is 35%. In FY 2010, the Department proposed that the target for this measure in FY 2010 and FY 2011 be equal to this average. The target was revised upward by the Department to 45% for FY 2012 and subsequent years to be more consistent with the data submitted by NTID for FY 2009, 2010, and 2011. In FY 2012, it was also determined that the target percentages across all three categories (Measures 3.1, 3.2, and 3.3) would equal 100% of the alumni being tracked by NTID.

Explanation: This indicator was added as part of the post-school outcomes to provide a more complete and accurate picture of outcomes for NTID graduates. The measure focuses on graduates who are in advanced education or training during their first year after graduation. Separate measures cover graduates who are in the workforce during their first year after graduation and graduates who are not engaged in either advanced education or training or in the workforce during their first year after graduation.

Performance Indicators (continued)

Measure 3.3 of 3: The post-school rate of NTID graduates who are not engaged in either advanced education or training or in the workforce during their first year after graduation (desired direction: decrease)			

Graduation Year	Target	Rate	Status
2014	5	10	Target Not Met
2015	5	11	Target Not Met
2016	5	9	Made Progress From Prior Year
2017	5	5	Target Met
2018	5	8	Target Not Met
2019	5	7	Made Progress From Prior Year
2020	5	9	Target Not Met
2021	5	5	Target Met
2022	5	4	Target Surpassed
2023	5	7	Target Not Met

Source: National Technical Institute for the Deaf, post-graduation employment records

Frequency of Data Collection: Annual

Target Context: The average rate of the 2005, 2006, and 2007 graduates who were neither employed nor in advanced education or training full-time within one year after graduation was 8%. In FY 2010, the Department proposed that the target for this measure in FY 2010 and subsequent years be equal to this average. The target was revised downward by the Department to 5% for FY 2012 and subsequent years to reflect changes made in the two previous indicators on the percentage of students employed and/or in advanced education or training during their first year after graduation and each alumnus being counted only once. This allows the percentage across all three categories (Measures 3.1, 3.2, and 3.3) to equal 100% of the alumni being tracked by NTID.

Explanation: This indicator has been added as part of the post-school outcomes to provide a more complete and accurate picture of outcomes for NTID graduates. The measure focuses on graduates who are not engaged in advanced education or training or in the workforce during their first year after graduation. Other measures cover graduates who are in the workforce during their first year after graduation and graduates who are in either advanced education or training during their first year after graduation.

Performance Indicators (continued)

Objective 4 of 4

In spring 2022, the Department proposed a new measure of operational efficiency in replacement of "Objective 4: Improve the efficiency of operations at NTID as defined by the cost per successful student outcome, where the successful outcome is graduation," which was too reliant on enrollment (already measured in Objective 1) and federal appropriations (over which NTID has no control). The Department, in consultation with NTID, proposed a new measure to look at graduation rates supported by federal funding. In November 2023, NTID reported that information for the first time.

The percentage of students supported with NTID funding* who graduated.

Measure 4.1 of 1: The percentage of students supported with NTID funding* who graduated.

2023 Cohort	Graduate within 100% of Normal Time	Graduate within 150% Normal Time	Graduate within 200% of Normal Time	Still enrolled	Not enrolled
Associate	0.8%[1]	25.4%[2]	43.2%[3]	6.1%[3]	50.7%[3]
Bachelor	59.6%[3]	67.0%[4]	70.9%[5]	0[5]	29.1%[5]

The cohort years reported in the table above are associated with students entering in: fall 2020[1], fall 2019[2], fall 2018[3], fall 2015[4], and fall 2013[5].

2024 Cohort	Graduate within 100% of Normal Time	Graduate within 150% Normal Time	Graduate within 200% of Normal Time	Still enrolled	Not enrolled
Associate	0.7%[1]	31.3%[2]	41.3%[3]	7.9%[3]	50.8%[3]
Bachelor	55.3%[3]	73.8%[4]	70.6%[5]	0[5]	29.4%[5]

The cohort years reported in the table above are associated with students entering in: fall 2021[1], fall 2020[2], fall 2019[3], fall 2016[4], and fall 2014[5].

Source. National Technical Institute for the Deaf, Registrar Office records.

Data Quality. In November 2023, NTID reported to the Department the graduation rates associated with associate and bachelor first-time full-time cohort students at different intervals and across multiple cohorts. Reported data are as most recently available at each interval, and further described in the following section.

Target Context: In determining the appropriate target each year for the federal cost per graduate, future inflation must be considered, as well as the variation in the number of students who graduate each year from NTID. The Department has identified and established targets for FY 2010 and subsequent years.

Explanation. At the cohort level, it's important to acknowledge the soonest available data as a function of greatest program length within the degree level reported, and at the time of reporting. NTID offers both two-year and two-and-a-half year programs, as well as a pathway categorized as associate degree-seeking but leads to the completion of a bachelor degree (pre-baccalaureate).

- Associate cohort students are considered graduates within 100% of normal time if they complete their degree requirements within the specified program length of time, which in the case of the fall 2021 cohort reported above, suggests an on-time graduate in a two-year program as having

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* "Supported with NTID funding" is defined as a student who is supported, either partially or fully, by Federal funds made available under The Education of the Deaf Act.

completed their degree requirements before the fall 2023 semester, and for two-and-a-half-year program students by the end of the fall 2023 semester.

- Associate cohort students are considered graduates within 150% of normal time if they complete their degree requirements in:
    o Three years for those in two-year programs; and
    o Four years for those in two-and-a-half-year programs.

    Please note that 150% of a two-and-a-half-year program results in three and three-quarter years, and NTID has rounded up to enable an even interval of measurement. In the case of the fall 2020 cohort reported above, the 150% graduation rate is the aggregation of those two-year program students graduating before the fall 2023 semester, and for two-and-a-half-year program students before the fall 2024 semester.

- Associate cohort students are considered graduates within 200% of normal time if they complete their degree requirements in:
    o Four years for those in two-year programs; and
    o Five years for those in two-and-a-half-year programs.

    In the case of the fall 2019 cohort reported above, the 200% graduation rate is the aggregation of those two-year program students graduating before the fall 2023 semester, and for two-and-a-half-year program students before the fall 2024 semester. All remaining students from the fall 2019 cohort are summarized as either still enrolled or currently not enrolled at RIT.

It's also important to acknowledge that associate cohort students may later pursue a bachelor's degree, though only after initial placement within an associate degree program. Their acceptance into the higher degree level *may* take place prior to the first degree certification and after their outcome has been reported above. This creates the possible scenario whereby a student is reported as a non-graduate in Measure 4.1, but a graduate in Measure 2.3 and is a result of the timeframe at which we're looking at cohort students.

NTID-supported students also enroll in other colleges at RIT and at the bachelor degree level. RIT offers both four- and five-year programs.

- Bachelor cohort students are considered graduates within 100% of normal time if they complete their degree requirements within the specified program length of time, which in the case of the fall 2019 cohort reported above, suggests an on-time graduate in a four-year program as having completed their degree requirements before the fall 2023 semester, and for five-year program students by the end of the fall 2024 semester.

- Bachelor cohort students are considered graduates within 150% of normal time if they complete their degree requirements in:
    o Six years for those in four-year programs; and
    o Seven-and-a-half years for those in five-year programs.

    In the case of the fall 2016 cohort reported above, the 150% graduation rate is the aggregation of those four-year program students graduating before the fall 2022 semester, and for five-year program students by the end of the fall 2023 semester.

- Bachelor cohort students are considered graduates within 200% of normal time if they complete their degree requirements in:
    o Eight years for those in four-year programs; and
    o Ten years for those in five-year programs.

    In the case of the fall 2014 cohort reported above, the 200% graduation rate is the aggregation of those four-year program students graduating before the fall 2023 semester, and for five-year program students before the fall 2024 semester. All remaining students from the fall 2014 cohort are summarized as either still enrolled or currently not enrolled at RIT.

Strategic Planning

Greatness Through Difference, RIT's strategic plan for 2018-2025, is the primary guide for NTID's strategic plan.

Strategic Planning
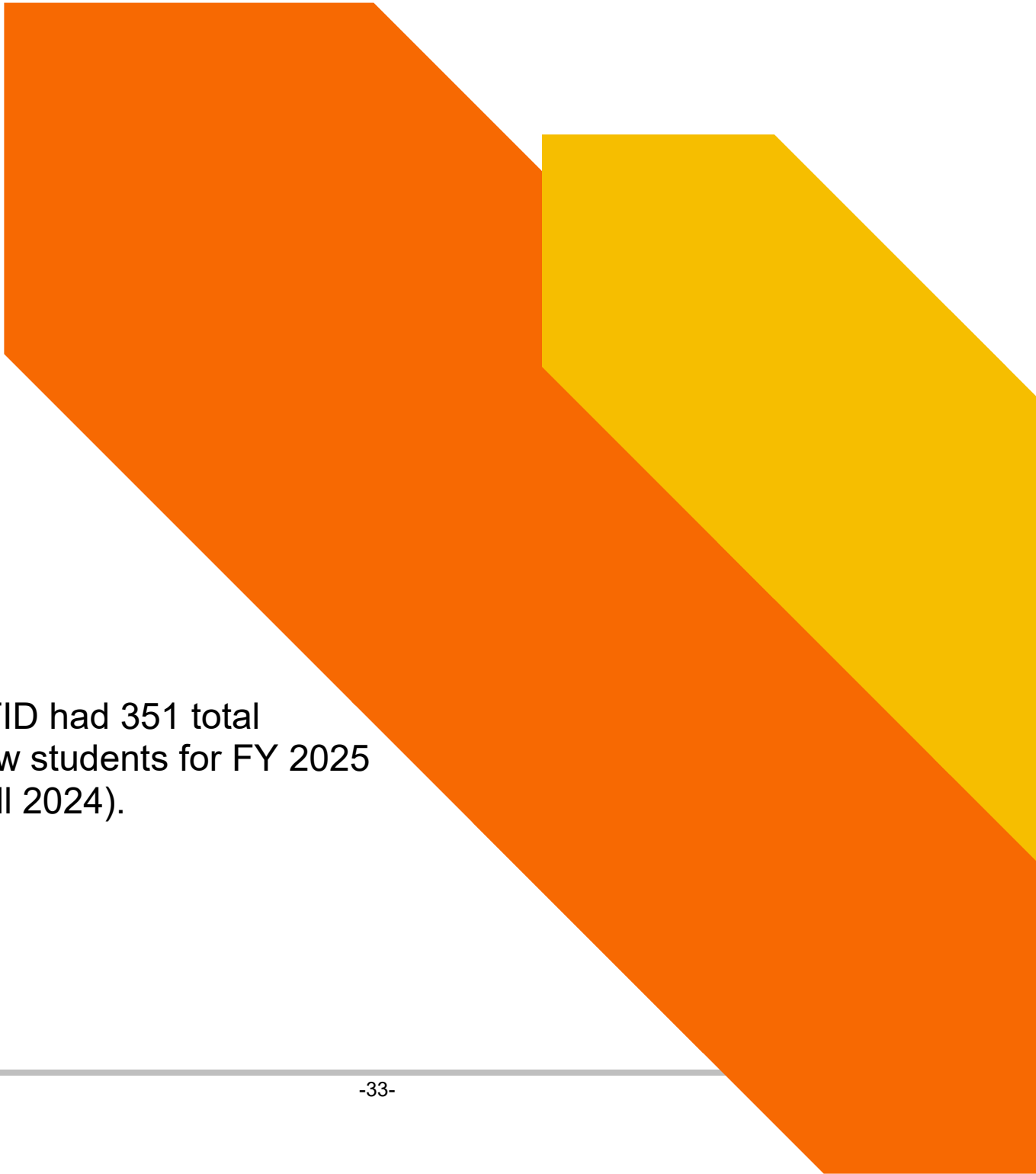
NTID is keeping track of RIT's revisions of its strategic plan: *Greatness Through Difference* (rit.edu/strategicplan/)*.* Since NTID's plan needs to align with the timeline and objectives of the larger strategic plan for RIT, NTID is waiting until RIT's revisions are completed. NTID will solicit input from the NTID National Advisory Group, RIT, and the Department of Education on the new plan before it is finalized.

Glenna Wright-Gallo, Assistant Secretary of the Office of Special Education and Rehabilitative Services, U.S. Department of Education, visits one of NTID's laboratories with Dr. Todd Pagano, left, executive director, NTID Professional and Student Scholar Development. Assistant Secretary Wright-Gallo gave the keynote speech at NTID's Commencement, May 2024.

Admissions and Enrollment

NTID had 351 total new students for FY 2025 (fall 2024).

Admissions and Enrollment Highlights

The RIT/NTID Office of Admissions visited 286 schools during the fall 2024 recruitment cycle. The Admissions team also hosted nine open house dates and offered individualized visit agendas and eight prospective student webinars across a variety of topics (i.e., financial aid, NTID overview). Student enrollment yield outpaced enrollment targets and is believed to be the result of the niche audience attracted to RIT/NTID; however, there continues to be a high number of schools who do not respond to contact attempts and students who decline the school visit request. The number of student service personnel (i.e., teachers of the Deaf, educational audiologists, speech language pathologists, vocational rehabilitation, deaf education graduate programs) communications and in-service became more targeted to update our database of contacts and to introduce and remind school stakeholders the values of the RIT/NTID experience, affordability of study at RIT/NTID, and who comprises the RIT/NTID student body. Continued shortage of itinerant teachers of the deaf and hard of hearing, gaps in student accessibility plans (i.e., 504, IEPs), and lack of awareness among non-signing, hard-of-hearing students who are singularly mainstreamed in their schools, with or without access and accommodations, continue to be formidable hurdles. We released a condensed admission presentation video to parents, schools, and students in addition to ongoing updates to the website and the launch of a dynamic application portal to engage students. The division was also streamlined to ramp up collaborations in the provision of youth outreach programs and activities to maintain a robust pipeline of prospective students.

The number of new* students entering NTID in fall 2024 was 351. The total included 242 deaf and hard-of-hearing freshmen and transfers, 54 deaf and hard-of-hearing graduate students (27 in the Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing [MSSE] and 27 in other RIT colleges), and 55 hearing students (44 in the ASL-English Interpretation program and 11 in the MSSE program).

Total enrollment was 1,176 compared to 1,129 for last year:

	Total
Undergraduate Programs	
Career Exploration Studies	11
Career-Focused Associate Programs	202
Associate+Bachelor's Programs and Pre-Baccalaureate	191
Baccalaureate (ASL-English Interpretation)	152
Baccalaureate (Community Development and Inclusive Leadership)	7
Programs in Other RIT Colleges	437
Subtotal NTID Undergraduate Programs	**1,000**
Graduate Programs at RIT	82
MSSE	84
MS Health Care Interpretation	10
Total Enrolled Students	**1,176**

NTID's student population remains strong in both ethnic and geographic diversity. Minority students represent 46% of this year's fall 2024 entering class, compared to 45% of the total NTID student body. Entering domestic students come from across the U.S., with 18% from the West, 22% from the South, 14% from the Midwest, and 46% from the Northeast. In addition, NTID enrolled nine new international students. The total number of international students is 32, or 2.7% of the student population.

In summary, NTID registered 351 new* students and is serving a total of 1,176 students.

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* New students are those who have not previously attended RIT or are attending as a graduate student for the first time.

Comparative Admissions Data*

Applications, excluding those to the ASL-English Interpretation or MSSE programs, decreased from last year. The acceptance rate was 67.7% of applications. Registrations were 284, achieving a yield rate of 63.3%.

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Applicants	**632**	**601**	**593**	**630**	**663**
% Increase or Decrease from Previous Year	+9.9%	-4.9%	-1.3%	+6.2%	+9.5%
Accepted Applicants	**458**	**438**	**415**	**440**	**449**
% Increase or Decrease from Previous Year	+9.6%	-4.3%	-5.3%	+6.0%	+2.0%
Acceptance Rate (% of Total Applicants)	72.4%	72.9%	70.0%	69.8%	67.7%
Registrations	**262**	**269**	**248**	**275**	**284**
Yield Rate (Registrations as a % of Accepted Applicants)	57.2%	61.4%	58.4%	62.5%	63.3%

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* Admissions data capture all activity stewarded by the NTID Admissions Office and include students who are readmitted.

Summer Vestibule Program

The Summer Vestibule Program (SVP) is an experience that allows new students to engage in career exploration and decision-making, adjust to college life and assess their academic competencies. Students get hands-on experience and information about various academic programs and majors.

SVP includes a Student/Parent Orientation Weekend designed to give participants an overview of the program and familiarize them with NTID and its place on the RIT campus. Informational seminars, awareness workshops, and in-depth orientation programs are offered to facilitate student-parent separation and student transition to the college environment.

There were 152 SVP registrants for summer 2024, and 152 continued on to register for fall semester 2024 (FY 2025).

	Number of Students*				
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
SVP Students Accepted	269	241	214	240	228
SVP Students Registered at Start of Program	149	155	122	155	152
SVP Students Registered in Academic Programs for Fall Term	145	152	122	152	152

All of this year's 152 Summer Vestibule Program, or SVP, students registered for classes at NTID in fall 2024.

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* Figures reported include deaf and hard-of-hearing international students, but do not include admissions activity in the ASL-English Interpretation program, the Master of Science program in Health Care Interpretation, or the Master of Science program in Secondary Education. Specific data on these students is reported in the section on Academic Programs.

NTID Student Enrollment by Term* (Deaf and Hard-of-Hearing Students Only)

The enrollment reported reflects only deaf and hard-of-hearing students in undergraduate programs on the RIT campus or in graduate programs at other RIT colleges. Not included are students enrolled in the ASL-English Interpretation program (152), deaf, hard-of-hearing, or hearing students enrolled in the Master of Science program in Secondary Education (84), or students enrolled in the Master of Science in Health Care Interpretation (10). In addition, large numbers of hearing, deaf, and hard-of-hearing students access a variety of part-time and non-credit-bearing coursework at NTID year round.

PERIOD COVERED		FALL TERM		WINTER TERM			SPRING TERM			SUMMER TERM		SUMMER VESTIBULE PROGRAM	
		A	B	A	B	C	A	B	C	A	B	A	B
FY 05:	Oct. 04-Sep. 05	1,097	-1.08%	1,029	-1.72%	-6.20%	962	-4.28%	-6.51%	222	-10.84%	190	+13.10%
FY 06:	Oct. 05-Sep. 06	1,066	-2.83%	988	-3.98%	-7.32%	926	-3.74%	-6.28%	263	+18.47%	219	+15.26%
FY 07:	Oct. 06-Sep. 07	1,064	-0.19%	998	+1.01%	-6.20%	963	+4.00%	-3.51%	339	+28.90%	254	+15.98%
FY 08:	Oct. 07-Sep. 08	1,154	+8.46%	1,099	+10.12%	-4.77%	1,040	+8.00%	-5.37%	396	+16.81%	295	+16.14%
FY 09:	Oct. 08-Sep. 09	1,260	+9.19%	1,216	+10.65%	-3.49%	1,155	+11.06%	-5.02%	428	+8.08%	265	-10.17%
FY 10:	Oct. 09-Sep. 10	1,275	+1.20%	1,166	-4.11%	-8.55%	1,170	+1.90%	+0.34%	411	-3.97%	269	+1.51%
FY 11:	Oct. 10-Sep. 11	1,303	+2.20%	1,213	+4.03%	-6.91%	1,211	+3.50%	-0.16%	442	+7.54%	269	0.00%
FY 12:	Oct. 11-Sep. 12	1,323	+1.53%	1,211	-0.16%	-8.47%	1,103	-8.92%	-8.92%	314	-28.96%	269	0.00%
FY 13:	Oct. 12-Sep. 13	1,306	-1.28%	1,168	-3.55%	-10.57%	1,082	-1.90%	-7.36%	323	+2.87%	268	-0.37%
FY 14:	Oct. 13-Sep. 14	1,237	-5.28%	*	*	*	1,118	+3.33%	-9.62%	259	-19.81%	212	-20.90%
FY 15:	Oct. 14-Sep. 15	1,197	-3.23%	*	*	*	1,054	-5.72%	-11.95%	308	+18.92%	226	+6.60%
FY 16:	Oct. 15-Sep. 16	1,220	+1.92%	*	*	*	1,072	+1.71%	-12.13%	270	-12.34%	203	-10.18%
FY 17:	Oct. 16-Sep. 17	1,122	-8.03%	*	*	*	1,002	-6.53%	-10.70%	309	+14.44%	174	-14.20%
FY 18:	Oct. 17-Sep. 18	1,081	-3.65%	*	*	*	944	-5.79%	-12.67%	271	-12.30%	170	-2.30%
FY 19:	Oct. 18-Sep. 19	1,005	-7.03%	*	*	*	862	-8.69%	-14.23%	247	-8.86%	151	-11.20%
FY 20:	Oct. 19-Sep. 20	943	-6.17%	*	*	*	812	-5.81%	-13.9%	285	+13.33%	148	-1.99%
FY 21:	Oct. 20-Sep. 21	886	-6.05%	*	*	*	807	-0.62%	-8.92%	335	+17.54%	152	+2.70%
FY 22:	Oct. 21-Sep. 22	929	+4.85%	*	*	*	842	+4.34%	-9.36%	335	0.00%	122	-19.74%
FY 23:	Oct. 22-Sep. 23	906	-2.48%	*	*	*	793	-5.81%	-12.47%	287	-14.43%	152	24.59%
FY 24:	Oct. 23-Sep. 24	890	-1.77%	*	*	*	810	+2.14%	-8.99%	277	-3.48%	152	0.00%
FY 25:	Oct. 24-Sep. 25	929	+4.38%	*	*	*							

NOTES: Column A = Number of student enrollments for the period covered
Column B = Percent change of enrollment from the same term in previous year
Column C = Percent change of enrollment from the previous term

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* Prior to FY 2014, RIT followed a quarter calendar. Beginning in FY 2014, RIT follows a semester calendar.

Admissions and Enrollment

Percent of Registered Students with Full-Time Status

On average, 93% of NTID-supported students are registered full time. At RIT, full-time status is defined as taking at least 12 credit hours for undergraduate students and at least nine credit hours for graduate students in a semester.

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025		
						Number	
					Percent	Full-Time	Total
Career Exploration	100%	100%	100%	100%	100%	11	11
Career-Focused and Associate+Bachelor's Degrees	96%	97%	97%	96%	98%	370	378
Pre-Baccalaureate	94%	91%	100%	93%	100%	15	15
Baccalaureate and Graduate	93%	90%	87%	93%	92%	478	519
ASL-English Interpretation	96%	98%	98%	99%	96%	146	152
Community Development and Inclusive Leadership	N/A	N/A	100%	100%	100%	7	7
Master of Science in Health Care Interpretation	9%	0%	0%	0%	0%	0	10
Master of Science in Secondary Education (MSSE)	100%	88%	90%	85%	85%	71	84
Overall	**94%**	**92%**	**91%**	**94%**	**93%**	**1,098**	**1,176**

International Student Recruitment*

This year, applications from international students numbered 86 and, of those, 15 were accepted and eight registered. Canadian students used to represent the largest contingent of international students, but many of them continue to experience a lack of funding resources, which discourages a number of prospective students from applying or prevents many of those accepted from being able to attend NTID. Students from developing countries also encounter financial difficulties, and NTID has limited scholarship dollars to assist them. However, per the Education of the Deaf Act, international students pay differing tuition rates, depending on whether they are from a developing or developed country. Until the situation in Canada changes, and until NTID obtains additional private scholarship funds, enrollment of international students will continue to be a challenge.

	Number of Students**				
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Applicant Continent of Origin					
Africa	19	24	21	22	29
Asia	13	23	29	32	38
Australia/Oceania	0	0	1	0	1
Europe	4	6	2	1	4
North America	2	9	9	12	11
South America	1	1	1	4	3
Unknown	0	0	0	0	0
Total Applicants	**39**	**63**	**63**	**71**	**86**
Accepted Applicants	**9**	**22**	**15**	**15**	**15**
Acceptance Rate (Percent of Total Applicants)	23%	35%	24%	21%	17%
New Registrations	**6**	**5**	**8**	**6**	**8**
Yield Rate (New Registrations as a Percent of Accepted Applicants)	67%	23%	53%	40%	53%
Returning International Students	**25**	**25**	**18**	**19**	**19**
Total Enrollment (Returning International Students plus New Registrations)	**31**	**30**	**26**	**25**	**27**

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* Data capture all activity stewarded by the NTID Admissions office and include students who are readmitted.

** Figures reported do not include admissions activity in the ASL-English Interpretation program, the Master of Science program in Health Care Interpretation, or the Master of Science program in Secondary Education. Specific data on these students is reported in the section on Academic Programs. These figures exclude non-degree-seeking students.

Admissions and Enrollment

Demographic Characteristics of All New Students

The demographic profile of new students in
FY 2025 remains consistent with the previous
year's profile.*

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Characteristics of Entering Students					
Gender					
Male	51%	52%	54%	56%	55%
Female	49%	48%	46%	44%	45%
Mean Age at Entry	20	21	20	20	20
Origin of Entering Students					
United States by Region: 100% of U.S. students distributed across four regions					
West	16%	14%	18%	21%	15%
Midwest	21%	12%	12%	13%	17%
South	23%	29%	26%	23%	25%
Northeast	40%	45%	44%	43%	43%
Distribution of United States and International Students					
United States	98%	98%	97%	98%	97%
International	2%	2%	3%	2%	3%
School Background of Entering Students					
First Time in College	80%	81%	85%	76%	83%
Transfer from Other Colleges	9%	8%	9%	12%	7%
Graduate Students	11%	10%	6%	12%	10%

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* Figures reported include deaf and hard-of-hearing international students, but do not include admissions activity in the ASL-English Interpretation program, the Master of Science program in Health Care Interpretation, or the Master of Science program in Secondary Education. Specific data on these students is reported in the section on Academic Programs. New students are those who have not previously attended RIT or are attending as a graduate student for the first time.

Demographic Characteristics of Enrolled Undergraduate Students

	FY 2025*		
	International	**U.S.**	**Overall**
Demographics			
Gender			
Male	63%	53%	53%
Female	37%	47%	47%
Program Area			
Career Exploration	0%	1%	1%
Career-Focused Associate Degrees	42%	23%	24%
Associate+Bachelor's Degrees	11%	23%	22%
Community Development and Inclusive Leadership	5%	1%	1%
Programs in Other RIT Colleges	42%	52%	52%
FY 2025 Status of Students Enrolled FY 2024			
Still Registered	70%	65%	65%
Withdrawn	6%	13%	13%
Graduated	24%	22%	22%

RIT's tiger mascot, RITchie, center, poses with new students in NTID's Summer Vestibule Program.

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* Undergraduate students only. Figures reported do not include students in the ASL-English Interpretation program, the Master of Science program in Health Care Interpretation, or the Master of Science program in Secondary Education. Specific data on these students is reported in the section on Academic Programs.

Students with Secondary Disabilities

The table shows the number and percent of NTID-supported undergraduate students eligible to receive services from the RIT Disability Services Office, which serves students "with physical or mental impairments that limit one or more major life activities." FY 2025 totals will be reported next year, as activity regarding the accommodations of students with secondary disabilities is captured over the full academic year. NTID works directly with the RIT Disability Services Office to accommodate these students through services such as notetaking and extended time to complete assignments. Their services ensure equal access to education based upon legal foundations established by federal law—the Rehabilitation Act of 1973, including Section 504, and the Americans with Disabilities Act of 1990. NTID has a committee of faculty and staff that focuses on the accommodation of deaf and hard-of-hearing students specifically with visual disabilities, a population that is increasing.

Number and Percent of Students Receiving Secondary Disability Services			
Fiscal Year	Total Deaf Students*	Students with Secondary Disabilities	Percent
2015	1,153	145	13%
2016	1,167	150	13%
2017	1,078	119	11%
2018	1,025	129	13%
2019	954	118	12%
2020	883	121	14%
2021	820	159	19%
2022	861	181	21%
2023	850	129	15%
2024	822	240	29%

Students with Secondary Disabilities

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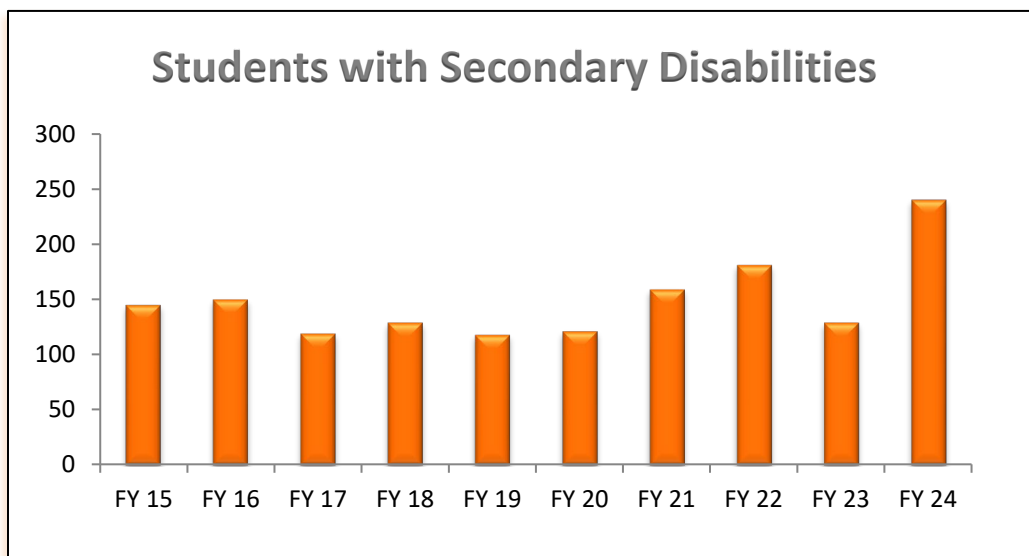
*   This figure includes all undergraduate deaf and hard-of-hearing students.

Origin of Students

NTID students enrolled as of fall 2024 come from 49 states. A total of 13 countries are represented among current international students.

Since NTID began accepting students, NTID has had students from more than 50 countries and all 50 states.

Home State or U.S. Territory (Domestic Students)	Number in Student Body FY 2025
Alabama	3
Alaska	1
Arizona	8
Arkansas	1
California	127
Colorado	10
Connecticut	20
Delaware	2
District of Columbia	2
Florida	49
Georgia	22
Guam	0
Hawaii	2
Idaho	3
Illinois	28
Indiana	11
Iowa	3
Kansas	1
Kentucky	2
Louisiana	8
Maine	8
Maryland	58
Massachusetts	43
Michigan	13
Minnesota	20
Mississippi	1
Missouri	10
Montana	1
Nebraska	3
Nevada	4
New Hampshire	6
New Jersey	47
New Mexico	8
New York	360
North Carolina	13
North Dakota	1
Ohio	27
Oklahoma	3
Oregon	7
Pennsylvania	63
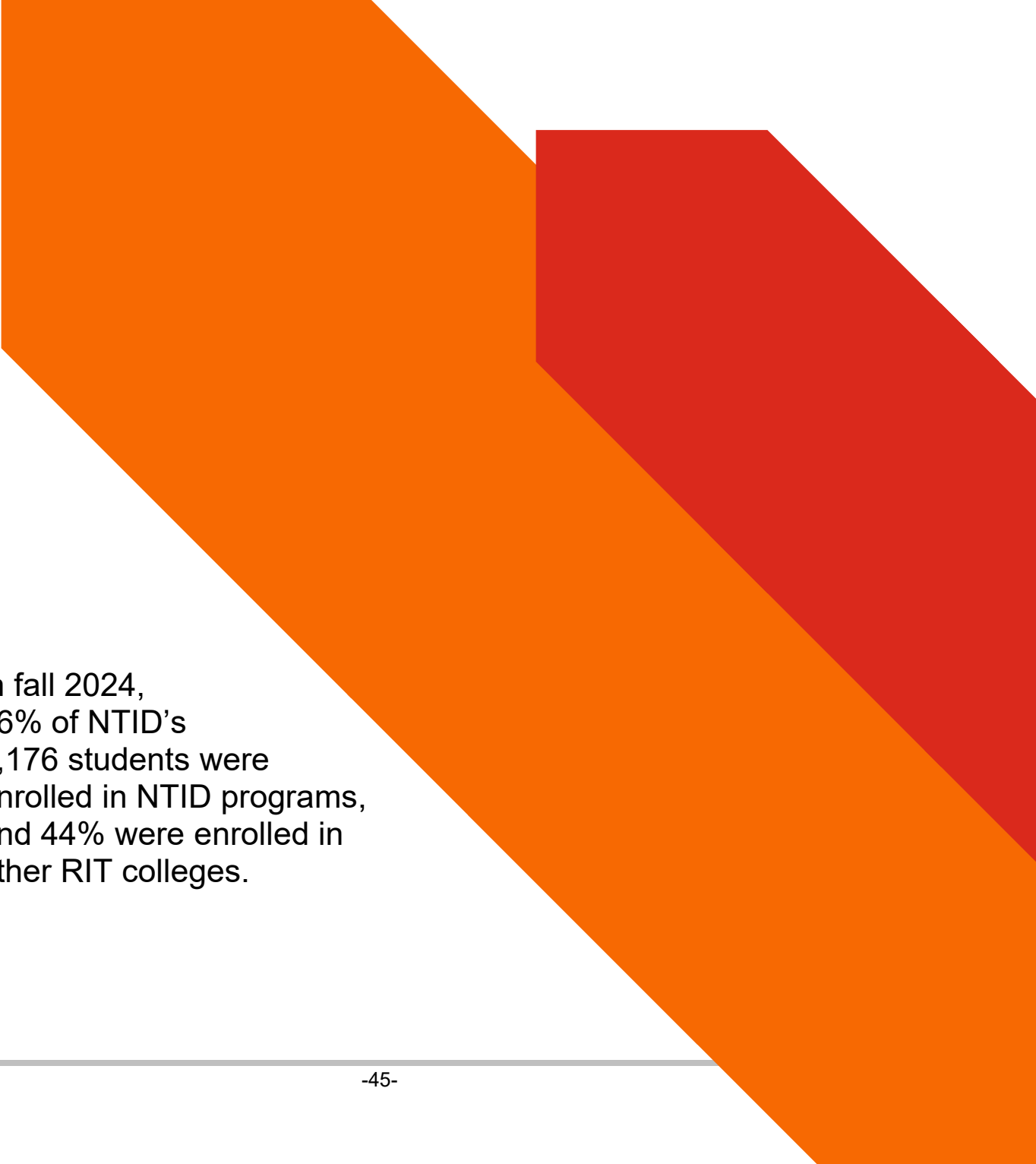
Home State or U.S. Territory (Domestic Students)	Number in Student Body FY 2025
Puerto Rico	1
Rhode Island	4
South Carolina	4
South Dakota	1
Tennessee	9
Texas	48
Utah	2
Vermont	5
Virgin Islands	0
Virginia	25
Washington	21
West Virginia	2
Wisconsin	19
Wyoming	0
Other*	4
Subtotal	**1,144**
International	**32**
Total	**1,176**

Where Are Our Students From?

NEW HAMPSHIRE, 6
MAINE 8
VERMONT, 5
WASHINGTON 21
MONTANA 1
NORTH DAKOTA 1
MINNESOTA 20
RIT
NEW YORK 360
MASS., 43
OREGON 7
WISCONSIN 19
MICHIGAN 13
R.I., 4
CONN., 20
IDAHO 3
WYOMING 0
SOUTH DAKOTA 1
PENNSYLVANIA 63
NEW JERSEY 47
IOWA 3
DELAWARE, 2
NEVADA 4
NEBRASKA 3
OHIO 27
MARYLAND, 58
UTAH 2
COLORADO 10
ILLINOIS 28
INDIANA 11
W. VIRGINIA 2
VIRGINIA 25
DISTRICT OF COLUMBIA, 2
KANSAS 1
CALIFORNIA 127
MISSOURI 10
KENTUCKY 2
N. CAROLINA 13
ARIZONA 8
NEW MEXICO 8
OKLAHOMA 3
ARKANSAS 1
TENNESSEE, 9
S. CAROLINA 4
MISS. 1
ALABAMA 3
GEORGIA 22
TEXAS 48
LOUISIANA 8
FLORIDA 49
ALASKA 1
HAWAII 2

GUAM - 0
PUERTO RICO - 1
VIRGIN ISLANDS - 0
Other - 4

In addition, NTID has 32 international students enrolled based on visa status.

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* U.S. citizens living in other countries or with unknown origin.

Academic Programs

In fall 2024,
56% of NTID's
1,176 students were
enrolled in NTID programs,
and 44% were enrolled in
other RIT colleges.

Academic Program Highlights

NTID continued its efforts to deliver responsive, relevant, and up-to-date technical and general education curricula during AY 2023-2024. The most significant effort was focused on finalizing the proposal to completely revamp NTID's English course structure and simultaneously to modify the English requirements in all of NTID's Associate in Occupational Studies (AOS) programs. The new curriculum is composed of three career-focused developmental courses (NENG-104 Literacies I, NENG-114 Literacies II, and NENG-115 Literacies III) for underprepared students. In addition, three new college preparatory English courses (NENG-121 Bridge to Academic Literacies, NENG-233 Introduction to Academic Writing for Humanities and Social Sciences Majors, NENG-234 Introduction to Academic Writing for STEM Majors) are in place to support student English development as they work toward completing UWRT-150 FYW: Writing Seminar, the standard English composition course for students in Associate in Applied Science (AAS) and in Associate in Science (AS) programs.

With these new English courses in place, a proposal was developed to modify the common 15-credit, career-focused English, math, and other foundational course framework required in all of NTID's AOS programs. The two Career English courses that had been part of this core were replaced with electives for two primary reasons. First, many of the college's AOS students were already opting to take one or more of the college preparatory English courses to try to qualify to switch to an AAS or AS program. Second, each technical AOS program already includes its own career-focused writing and communication requirements in its major coursework. Therefore, going forward, AOS-seeking students will have to place above NENG-115 Literacies III or take as many of the developmental English courses as necessary to complete NENG-115 in order to earn the AOS degree. Most of these developmental English courses and all of the college preparatory courses can be counted toward the new AOS electives allotment. Students desiring the AOS degree and who place out of the developmental English curriculum may instead apply additional math, communication, and other foundational coursework toward the AOS electives allowance. This proposal was reviewed and approved by the college and university curriculum committees, the university's Faculty Senate, and by the Provost. Additional review was required by the New York State Education Department (NYSED) due to the cumulative change in credits in each program relative to the last time each program was registered with NYSED. Approval was granted in time for these changes to go into effect for students starting in Fall 2024.

Additional effort was undertaken to update the academic minor and immersion in American Sign Language/Deaf Cultural Studies (ASLDCS). These programs are optional parts of the university's baccalaureate curriculum. Historically, a number of NTID ASLDCS courses were not included in this minor and immersion because students in associate degree programs do not pursue a minor or a general education immersion as part of their degree requirements. However, with more students taking these courses while in the associate degree and then transitioning to a bachelor's degree program, they rightly expect these courses to satisfy the immersion and minor requirements. As such, approximately 15 courses have been added to the ASLDCS minor and immersion effective fall 2024 for the benefit of students.

The creation of new NTID degree programs is ongoing. A full program proposal for the AAS in Precision Manufacturing Technology, complete with articulation into three Bachelor of Science programs offered by RIT's College of Engineering Technology, was finalized in AY 23-24 and will be reviewed in AY 24-25. Proposals for the AAS in Cybersecurity and AAS in Geospatial Technology are under active development with other new programs in the proposal pipeline.

Academic Program Highlights (continued)

First Year Experience/Career Exploration Studies and Summer Vestibule Program

Beginning with NTID's Summer Vestibule Program (SVP)/Orientation experience, First Year Experience (FYE) provides an array of courses and co-curricular programs, as well as personal/academic counseling, designed to help students successfully complete their first year of college. In summer 2024, 152 students attended SVP and participated in a variety of activities prior to their arrival on campus in August, including placement tests/assessments and Zoom meetings with their department chairperson and assigned counselor/academic advisors (CAA's). Once on campus, students participated in a variety of in-person programming within the larger RIT Orientation framework.

The Career Exploration Studies program (CES), which also is housed within FYE, allows students the opportunity to explore technical programs while satisfying necessary core and/or prerequisite coursework. During AY 2023-2024, CES served 23 students in the fall and 12 students in the spring.

Career-Focused Associate Degrees

At the beginning of AY 2024-2025, there were 213 deaf and hard-of-hearing students enrolled in career-focused programs, including students enrolled in Associate in Occupational Studies (AOS) and non-associate+bachelor's Associate in Applied Science (AAS) degrees as well as students in Career Exploration Studies.

The Business Studies department continues to maintain steady enrollment in the AOS, AAS, and Associate in Science (AS) Business programs. Twelve students completed cooperative work experiences in AY 2023-2024. The AAS in Business Administration, which accepted its fifth cohort this year, continues to thrive. The department launched the college's first fully online AAS degree for Business Administration two years ago and continued with recruitment strategies to bolster enrollment. The curriculum for the AOS degree went through signification revisions. Changes were made, which included removing four courses, developing five new courses, and modifying several existing courses. This change is warranted given the changes in the employment sector.

The Department of Engineering Studies' (DES) career-focused programs, Architecture and Civil Drafting Technology (ACDT) and Precision Manufacturing Technology (PMT), are in their fifth cohort. The AY 2023-2024 enrollment of both programs, including those who matriculated in prior academic years is 12 (ACDT) and 29 (PMT). For AY 2024-2025, DES had an influx of first-year students in PMT (14) for the second year in a row. DES has five first-year students in ACDT. A new program, Precision Manufacturing Technology (PMT-AAS), is in the works now with expected approval during AY 2024-2025. This program is modeled after the current PMT-AOS with additional rigor required of students to help prepare them for entry into a bachelor's degree program.

In AY 2023-2024, the Department of Information and Computing Studies (ICS) delivered its Applied Computer Technology and Mobile Application Development programs primarily in person, while also offering flexible online learning options when needed. A significant number of ICS students successfully secured co-op and full-time positions, engaging in diverse roles ranging from technical support to app development on virtual reality platforms. To further strengthen the curriculum, ICS updated course materials across several subjects, ensuring alignment with current industry standards to better prepare students for obtaining relevant certifications.

Throughout AY 2023-2024, ICS continued offering the CompTIA A+ certification course to both current students and alumni, with numerous individuals successfully passing both parts of the exam. Additionally, ICS has expanded certification opportunities to include Cloud Essentials+, Network+, and Security+, allowing students to pursue these certifications based on their academic performance in their courses. These certifications further enhance students' preparedness and competitiveness for entering the IT workforce.

Academic Program Highlights (continued)

In AY 2023-2024, the ICS department made significant modifications to the Applied Computer Technology program to closely follow current industry trends, ensuring students are well-prepared for the evolving demands of the IT field. By incorporating the latest technologies and methodologies, such as computer applications, cloud computing, and scripting, ICS has tailored the curriculum to align with real-world applications. These updates provide students with hands-on experience and relevant skills that directly translate to the changing landscape of the industry, making them more competitive in the job market.

The Department of Liberal Studies (DLS) continued to offer general education courses in composition, primarily focusing on developmental reading and writing skills. In fall 2023, the entire developmental English curriculum was revamped and submitted to the college, university, and New York State curriculum review and approval bodies. Approval was granted in spring 2024, and all the new courses were put on the university course schedule effective fall 2024.

In summer 2024, DLS continued its flagship biannual faculty-led program to France. France has been part of the NTID Study Abroad portfolio since 2019. In 2024, 23 students and three faculty visited cultural and historical sites in Paris, Marseilles, and Toulouse. Excursions included visits to Institut National de Jeunes Sourds de Paris (National Institute for Deaf Youth in Paris -- first permanent free school for the deaf in the world), Paris Catacombs, Pantheon (the resting place for illustrious Frenchmen, such as Louis Braille, Marie and Pierre Curie, Jean Rousseau, Victor Hugo, Emile Zola, Voltaire), Louvre Museum (one of the largest museums in the world), Versailles (1700s French royalty), and the oldest city in France – Marseilles.

The Department of Science and Mathematics' Laboratory Science Technology offers two associate degree programs of study. The first is the AOS/AAS in Lab Science Technology (LST) and the second is the AS in General Science (GenSci). All students in the LST program are required to complete a co-op activity the summer following their second year of studies. Co-op activities are optional, but encouraged, for our GenSci students. Seven of our students (6 LST, 1 GenSci) had successful summer 2024 co-op activities on-site at the locations of their internships. Our students completed this degree requirement in summer research programs held at North Carolina State University (1), University of Tennessee at Knoxville (2), Donald Danforth Plant Science Center (1), Tufts University (2), James Madison University (1). We awarded seven AOS/AAS degrees and had a 73.3% first-year persistence rate in that degree track.

The Department of Visual Communications Studies (VCS) offered two- and three-dimensional design and production courses in two programs, Design & Imaging Technology (DIT) and 3D Graphics Technology (3DGT). In fall 2024, the department has continued to thrive, with 110 undergraduate students enrolled in AOS and AAS degree programs. This represents a welcome increase from the previous year and marks our highest headcount in the past five years. Additionally, 76 cross-registered students are enrolled in the College of Art and Design. This significant enrollment attests to the department's commitment to fostering an inclusive and collaborative environment where students from various backgrounds converge to engage in a shared pursuit of knowledge. As part of the AOS and AAS degree requirements, 11 students completed cooperative work experiences in AY 2023-2024.

Associate+Bachelor's Degrees

The availability of clearly delineated associate+bachelor's (A+B) pathways that provide a seamless transition from an NTID associate degree and into a baccalaureate program on this campus has been a key feature of NTID's educational portfolio for many years. These have been quite successful in terms of program growth, promotion of associate degree completion, transfer to a bachelor's degree, and subsequent graduation at the baccalaureate level.

At the beginning of the 2024-2025 academic year, 191 students were enrolled in A+B degree and pre-baccalaureate programs. This number has steadily increased as the number of such programs is expanded, new articulation agreements are added, and the programs are marketed as precursors to RIT baccalaureate programs.

Academic Program Highlights (continued)

As part of ongoing efforts to review the college's A+B pathways, several updated articulation agreements with bachelor's degrees offered by the other college of RIT were developed. The AS in General Science now has three new health sciences-related options, allowing students to qualify to enter the BS in Nutritional Sciences, BS in Exercise Science, and BS in Global Public Health offered by RIT's College of Health Sciences and Technology. The articulation agreement for the AS in Applied Computer Technology has been updated to reflect current coursework in the BS in Computing and Information Technologies and the BS in Human-Centered Computing from RIT's Golisano College of Computing and Information Sciences (GCCIS). The agreement covering students completing the AAS in Applied Mechanical Technology and entering the BS in Mechanical Engineering Technology, BS in Mechatronics Engineering Technology, and BS in Robotics and Manufacturing Engineering Technology offered by the College of Engineering Technology was also updated.

In the Business Studies department, the A+B degree programs continue to successfully graduate students who are accepted into RIT's Saunders College of Business. Five students were accepted to Saunders College of Business during AY 2023-2024. The Administrative Support Technology, Accounting Technology, and Business Administration programs continue to experience success with students transferring to and graduating from RIT's School of Individualized Study (SOIS). Four students were accepted to SOIS during AY 2023-2024. Current department numbers show 55% of students are in AS and BS degree programs and 45% are in AOS/AAS degree programs.

The Department of Engineering Studies (DES) has two A+B degree programs: Applied Mechanical Technology (AMT) and Civil Technology. New student enrollment for fall 2024 is six students in (AMT). Civil Technology is fluctuating currently but has a few students.

The Information and Computing Studies (ICS) department offers pathways to bachelor's degrees in Human-Centered Computing, Computing and Information Technologies, and Web and Mobile Computing. In summer 2024, students transitioning from associate programs to the bachelor's degree programs secured co-op and full-time positions with prestigious companies such as PNC Financial Services, Fidelity, Microsoft, and Dow. These programs continue to provide students with valuable opportunities, enabling them to secure full-time employment upon graduation.

The Department of Liberal Studies' AS in Applied Liberal Arts (APPLA-AS) remains one of the largest A+B degree programs at NTID, with 26 students. In the 14th year of the program, six APPLA-AS students successfully graduated with an AS degree. All have embarked on different academic journeys in other colleges at RIT, with two in Psychology-BS and one each studying Advertising and Public Relations-BS, Environmental Science-BS, and Criminal Justice-BS. In addition, one is pursuing the LEAD-BS through the department.

The Department of Science and Math General Science degree program challenges its students with a mixture of NTID-taught coursework and coursework taught in other RIT colleges. Over the last academic year, we awarded two degrees for this program and experienced a 100% persistence rate. Upon completion of the associate degree, most of our LST and GenSci students matriculate into bachelor's degree programs offered by RIT's College of Science (COS) and College of Health Sciences and Technology (CHST). Although these students are no longer under an NTID degree program of study, they remain "cross-registered" through the provision of our department's academic support resources that offer Deaf-friendly and accessible co-instruction (tutoring) of their coursework. Over the past year, we had 19 cross-registered students awarded COS/CHST BS degrees and one cross-registered graduate student awarded an MS degree.

There is a long history of students successfully making the transition from NTID's Visual Communications Studies: Design & Imaging Technology AAS degree program into an RIT College of Art and Design BFA or BS program outside of formal A+B degrees. As a department, VCS is continuing to explore the establishment of new articulation agreements with the College of Art and Design, as these are a testament to the commitment to providing students with a seamless educational pathway and expanding opportunities for interdisciplinary collaboration. By establishing a bridge between programs, VCS aims to create a dynamic synergy that allows students to seamlessly transfer credits, fostering a more flexible and

Academic Program Highlights (continued)

holistic approach to their education. This partnership not only enhances the academic offerings available to VCS students but also strengthens the ties between colleges, laying the foundation for a collaborative and innovative future.

Community Development and Inclusive Leadership (LEAD)

In August 2022, the Department of Liberal Studies officially began its baccalaureate degree program in Community Development and Inclusive Leadership (LEAD). This is the first BS degree offered by NTID for both deaf and hearing students. At the time of this report, there were seven students enrolled in the major. Faculty continue to develop courses for the major, many of which satisfy general education requirements in addition to the immersions and minors in Dialogues in Diversity and Deaf Leadership. A total of 260 students, both hearing and deaf, took various LEAD courses.

American Sign Language and Interpreting Education (ASLIE)

American Sign Language and Interpreting Education (ASLIE) offers two-degree programs, six certificate programs, NTID ASL courses, and the NTID New Signers Program. ASLIE faculty also teach the Modern Languages & Cultures department's ASL courses offered through RIT's College of Liberal Arts, as well as several courses in NTID's MS in Secondary Education program.

BS in ASL-English Interpretation Program

One of only 15 bachelor's programs nationwide accredited by the Commission on Collegiate Interpreter Education, the BS in ASL-English Interpretation (BSI) program solicits stakeholder input through senior, alumni, and employer surveys and from its Advisory Group. The BSI program enrolled 45 new students in Fall 2024, bringing the total number of students in Fall 2024 to 152.

Total number of students enrolled in AY 2024-2025:

AY 2024-2025	Enrollment
First Year	21
Second Year	34
Third Year	34
Fourth Year	63
Total	**152**

Thirty-two students graduated with a BSI degree in AY 2023-2024. According to senior satisfaction survey results, 71% of the 34 respondents were satisfied with what they learned in the program. In AY 2023-2024, six faculty/staff members completed specialized training in developing effective rubrics, diagnosing students' performance, developing targeted activities to enhance students' interpreting skills, and assessing students' professional dispositions.

In addition to the program courses that are required for graduation, BSI students can take a variety of specialized elective courses that enhance their skill set and may provide a competitive edge when seeking employment. Some of these courses include Interpreting Frozen & Literary Texts, Introduction to Working with the DeafBlind Community, Introduction to K-12 Interpreting, Educational Interpreting: Elementary Settings, Educational Interpreting: Middle/Secondary Settings, Educational Interpreting: Post-Secondary Settings, Introduction to Cued American English, Healthcare Interpreting, Mental Health Interpreting, Introduction to Legal Interpreting, Community Interpreting, Introduction to VRS/VRI Interpreting, and Interpreting in Research Settings.

The BSI program once again partnered with Sorenson Video Relay Service, an industry leader. Sorenson's Synergy Program provides students the opportunity to observe working interpreters in the Rochester, New York, call center. Sorenson also offered students workshops on a variety of topics.

Students in the BSI program provided pro bono interpreting services to the Rochester community as a way to satisfy practicum requirements and earn valuable interpreting experience. The practicum coordinator screens such requests for appropriateness.

MS in Health Care Interpretation Program

ASLIE's MS in Health Care Interpretation program enrolled 11 students in the eighth cohort beginning summer 2024. For AY 2024-2025, the total enrollment is 10. The aim of this program is to address the national shortage of sign language interpreters who are prepared to work in healthcare settings. The goals of the program are to prepare graduates to effectively interpret for deaf consumers (patients and family members) in healthcare environments, effectively interpret for deaf health professionals in academic and clinical settings, and demonstrate administrative skills enabling them to analyze, conduct, and consult on the effective and efficient provision of interpreting services in health care institutions.

Certificate in Healthcare Interpreting (CHI) Program

The Certificate in Healthcare Interpreting (CHI) program is ASLIE's longest-running certificate, now in its 14th year. This fully online, nine-month program accepted 18 participants this year. Program graduates consistently provide highly positive feedback, establishing NTID as a national leader in healthcare interpreting education.

Certificate in Educational Interpreting (CIE) Program

The Certificate in Educational Interpreting (CIE) program is a nine-month online offering. Now in its fourth year, the CIE program enrolled 14 participants, and feedback continues to be overwhelmingly favorable. Pre- and post-certificate surveys are used to gather feedback and inform ongoing program improvements.

Certificate in Deaf Interpreting (CIDI) Program

The Certificate in Deaf Interpreting (CIDI) program is in its third year and has enrolled 16 participants. This seven-month program is delivered synchronously online, with a three-day in-person training on DeafBlind interpreting. Due to high demand, this program is exploring options for expanding enrollment.

Certificate in Trilingual Interpreting (CITRI) Program

The Certificate in Trilingual Interpreting (CITRI) program is also in its second year, serving 19 participants. The program emphasizes bilingual interpretation between ASL and Spanish, English and Spanish, and ASL and English. This nine-month program uses a blended learning model, with guest presenters and independent work contributing to a well-rounded experience.

Certificate in Signed Language Translation (CSLT) Program

The Certificate in Signed Language Translation (CSLT) program, the newest addition to ASLIE's certificate offerings, currently has 14 participants. This 17-week program, running from August to December, is delivered synchronously via Zoom, with guest presenters renowned in the ASL translation field sharing their expertise.

Certificate in International Sign Interpreting (CISI) Program

The Certificate in International Sign Interpreting (CISI) program is set to launch in February 2025. This 20-week, fully online asynchronous program will run from February to May and again from September to December. The program is open to both Deaf and hearing interpreters from around the world.

Academic Program Highlights (continued)

Modern Languages & Cultures Department's ASL Courses

ASLIE faculty teach ASL courses in RIT's College of Liberal Arts Modern Languages & Cultures Department: Beginning ASL I and II, Intermediate ASL I and II, and Advanced ASL I and II for RIT students who want to take ASL as an elective or to fulfill their liberal arts immersion and minor. An ASL immersion comprises any three courses from ASL and Deaf Cultural Studies. In AY 2023-2024, 52 students were enrolled in the ASL and Deaf Cultural Studies minor and 454 students were enrolled in the immersion.

NTID ASL Programs

NTID ASL Courses

The ASLIE department provided ASL courses for NTID students as part of the ASL/Deaf Studies requirement: ASL I, ASL II, ASL III, Beginning Mexican Sign Language, Structure of ASL, and Strategies for Teaching ASL. In AY 2023-2024, 57 students enrolled in NTID ASL courses.

New Signers Program

Now in its 14th year, the New Signers Program concentrates a four-credit course into an accelerated and immersive three-week summer program. This year, 18 incoming first-year and transfer students with minimal or no ASL skills were given the opportunity to live on-campus prior to fall semester in order to learn basic ASL and Deaf culture, interact with each other, and reflect about their learning progress in a daily journal. This builds their confidence and allows them to communicate effectively with NTID instructors and peers when fall semester classes start.

Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE)

The Master of Science program in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE) graduated 33 students during AY 2023-2024, in its 30th year.

All MSSE graduates are eligible to receive initial certification from New York State (NYS) in the education of students who are deaf or hard of hearing (grades K-12) and/or an academic content area (grades 7-12) if they meet all of the certification requirements, including the NYS teacher certification exams. Teacher candidates can choose to pursue certification from the states in which they are teaching if they do not take NYS certification examinations. All graduates are eligible to receive provisional certification from the Council on Education of the Deaf (CED).

The teacher-candidates are also required to observe veteran teachers in live classroom situations as part of their 100-hour practicum requirement. This provides the opportunity to observe strategies for classroom management, assessment, lesson planning, and instructional delivery. These are all areas students focus on during their student teaching. After their observations, they make connections to the MSSE program by reflecting on effective teaching strategies they would apply to their future classrooms.

In AY 2023-2024, the MSSE program had an enrollment of 82 students, of whom 67% were deaf or hard of hearing and 41% were members of underrepresented populations. Of these students, 41 are anticipating graduation from the program during AY 2024-2025. The MSSE program continues to actively recruit students with strong content area backgrounds, especially in science and math through the 4+2 program with RIT's College of Science, College of Liberal Arts, and Kate Gleason College of Engineering, as well as RIT's School of Individualized Study.

The program has the privilege of working with international students. During AY 2023-2024, the program served four international students from Uganda, Tanzania, China, and Canada. In Fall 2024, MSSE welcomed two incoming international students from Ghana and Canada.

Academic Program Highlights (continued)

MSSE is accredited by the Council for the Accreditation of Educator Preparation (CAEP), 2020-2027, and approved by the Council on Education of the Deaf (CED), 2022-2027. As a result of recommendations from CAEP, an advisory group has been established for the MSSE program composed of administrators, teachers, and program stakeholders to further inform the scope of changes needed for continuous program improvement.

Communication Studies and Services (CSS)

The Communication Studies and Services (CSS) department is composed of faculty and staff with expertise and training in the areas of communication, audiology, and speech-language pathology. CSS audiologists and speech-language pathologists offer for-credit courses for students. Faculty and staff provided 57 credit hours of instruction for 198 students in AY 2023-2024.

CSS continues to offer several courses that cover a variety of topics geared toward workplace success: Problem Solving, Interpersonal Relationships, Dialogue on Black Perspectives, Communication Across Cultures, Effective Teams, and Organizational Communication & the Deaf Employee. In response to current information seeking and sharing trends experienced online, CSS has created a new course offering titled Fact or Fiction: Becoming a Wise Consumer of Digital Information. This timely course provides training for students to recognize, manage, and ethically counteract misinformation found in online spaces. Each course satisfies one or more NTID General Education Perspectives or an RIT General Education Perspective requirement, with the latter allowing students to focus on their post-NTID academic goals. In recent years, CSS has worked to broaden the delivery format of its for-credit courses. The department now offers students a wider variety of learning environments to accommodate variances in learning styles and scheduling preferences. Students may choose from CSS course offerings that are conducted in-person, online, and in hybrid formats.

Other areas where direct instruction is provided are the Master of Science in Secondary Education (MSSE) and the ASL-English Interpretation programs. An Educational Audiology and Spoken Language Development required course is provided to students enrolled in the MSSE program. Cued Speech courses are provided as electives to those enrolled in the ASL-English Interpretation program.

In addition to these courses, the CSS department supports student learning in a variety of ways. The CSS department provides clinical services in the Audiology Center and Speech & Language Center, including appointment-based and walk-in opportunities. Faculty and staff provided 2,644 hours of audiology services to 672 students and other members of the RIT community, and 2,927 hours of individual speech-language instruction to 141 students. Additionally, during AY 2023-2024, the audiology discipline provided walk-in services in the Audiology Center. CSS reinforces students' academic and personal learning and development by hosting communication skill development groups. Topics of interest included homework, communication apps, executive function, group conversation, and gender-affirming communication. Faculty and staff within CSS serve as liaisons and advisors to student-centered initiatives such as the Vision Support Committee and the University's Women, Gender, and Sexuality Resource Center (WGSRC). The above listed services are available to students to further support communication, their success in the classroom, and their preparation for communicative success in the workplace.

CSS is committed to equipping future professionals with firsthand knowledge and training to provide audiological and speech-language services to deaf and hard-of-hearing adults. CSS annually accepts a full-time extern pursuing their doctoral degree in the field of audiology and internship experiences to master's degree students in Speech-Language Pathology each semester. These professionals-in-training come from various accredited universities and colleges throughout the United States.

NTID Learning Consortium

The NTID Learning Consortium is made up of the NTID Learning Center and the NTID Office of Online Learning.

Academic Program Highlights (continued)

The NTID Learning Center (NLC) provides a variety of academic resources to help students succeed in college, including computer workstations, spaces for tutoring and individual/group study, a multipurpose video lab, studying tools, and printing areas.

The NLC is temporarily relocated to accommodate upgrades to its permanent space. A full-time student worker is available at the resource desk and maintains an academically focused environment for users, while simultaneously developing work-related skills in a real-world setting.

The NLC has a number of studying and learning resources available for faculty, staff, and students to borrow from its resource desk, including calculators, smartphone chargers, headphones, memory card readers, webcams, PowerPoint clickers, and Wacom pen tablets. The NLC also provides a reference area with books provided by faculty for students to use for their courses.

The center also houses a multipurpose video lab for video recording and editing for the NTID community. This area is used by interpreting students, deaf and hard-of-hearing students, and faculty who want to use state-of-the-art video and editing equipment for classwork and projects and is available whenever the NLC is open. First-time users are required to participate in an orientation to the recording/editing equipment. Faculty and staff can reserve the lab using the EMS reserve system, while students can reserve it by contacting the NLC staff assistant.

For more formal instructional activities, the NLC utilizes the T-Mobile Experimental Distance Learning/Access Demonstration Lab (T-Mobile Lab). The lab supports various activities, such as conducting experimental classroom technology projects, as well as video/lecture-capturing for online, blended, and flipped course material development for archiving and subsequent "anytime/anywhere" access by students. The lab continues to serve as a beta-testing site for adapting and evaluating alternative instructional and access technologies in support of remote learners who are deaf or hard of hearing.

The NTID Office of Online Learning continues to expand the number of online courses taught by NTID instructors, as well as collaborates with on-campus partners implementing new programs for non-matriculated students. Once again, the NTID Office of Online Learning worked closely with the ASL-Interpreter Education Department to support the development of the Certificate in Translation, which launched in 2024 and is supporting the development of ASLIE's upcoming Certificate in International Sign Interpreting (CISI) scheduled to launch in February 2025. The NTID Office of Online Learning is working with a number of departments planning additional non-credit bearing certificates for working professionals and deaf and hard-of-hearing adults in a variety of disciplines. These distance-learning tools and delivery systems allow deaf and hard-of-hearing learners opportunities to learn anywhere, anytime.

In fall 2023, the NLC opened the NTID PearsonVUE Test Center (PVTC) for the Deaf and Hard of Hearing. As the first and only PVTC of its kind in the world, the NLC is able to schedule and proctor CompTIA certification exams for deaf and hard-of-hearing NTID-supported students, staff, and alumni in a Deaf-friendly environment. Expansion to include other certification exams is being planned.

Support for Baccalaureate Students

At the beginning of AY 2024-2025, 437 students (45% of the total deaf and hard-of-hearing student enrollment) were enrolled in baccalaureate programs in one of the other colleges of RIT. NTID faculty and staff provide tutoring, direct instruction, academic advising, and counseling for these students. In addition, interpreting, notetaking, and captioning services are offered through NTID's Department of Access Services.

Academic Program Highlights (continued)

NTID Educational Effectiveness Assessment

NTID conducted student learning outcomes assessments (OA) for all academic programs and affiliated departments during AY 2023-2024. These annual faculty-led reviews measure the degree to which specific course- and program-level goals have been achieved during the academic year, leading to an intentional full-circle opportunity for curriculum design, implementation, assessment, review, and updating based on a variety of factors. These assessments provide a basis for the identification not only of areas of demonstrated success and ongoing improvement but also aspects of programs where program faculty feel that adjustment needs to be considered. Where programs find a need to improve over the following academic year, as part of the OA reporting process they are expected to provide a Progress Report with specific details about at least one area of attention identified as needed from the prior year's submission. As such, academic degree programs also completed RIT Progress Reports based on their AY 2022-2023 results. Having completed the yearly assessment cycle, faculty may add program-determined areas that need future review and improvement and can remove items that do not need regular ongoing attention thanks to the flexibility of the university's overall OA implementation.

The data reporting process for RIT's AY 2023-2024 Progress Report cycle was completed in November 2024. It employed a web-based reporting format for program chairs and directors to respond to a series of questions and to report on one program-level student learning outcome listed in their AY 2022-2023 Outcomes Assessment Plans.

NTID's response rate was 100%, with 21/21 programs completing the report. NTID contributed favorably toward the RIT rate of 100% of programs completing assessments. Additionally:

- As determined from the prior year's aggregate report that was shared with the RIT Provost, the Board of Trustees, all college deans, and RIT's Student Learning Outcomes Assessment Committee (SLOAC), in AY 2022-2023, 100% of NTID programs met or exceeded established benchmarks for at least one student learning achievement, compared to the RIT level of 100%.
- During AY 2023-2024, each program's AY 2022-2023 Progress Report was evaluated for evidence of continuous improvement by the RIT Educational Effectiveness Assessment Office.
- Ninety-five percent of NTID programs indicated use of assessment results to guide program planning improvements, compared to RIT's 98%.

As a result of a comprehensive review and AY 2022-2023 report by its program faculty, NTID's Master of Science in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE) program was the 2024 recipient of the annual Excellence in Student Learning Outcomes Award that recognizes an academic degree program that is committed to best practices in assessment, improving student learning, and continuous program improvement. To qualify for the award the program must involve stakeholders in assessment, establish effective assessment planning and implementation processes, and demonstrate continuous improvement. MSSE has done significant work over the years to engage faculty in planning, collecting data, and using results to make improvements to curriculum, instruction, and assessment practices. The department continues to develop and refine tools and resources that contribute to student success in the program and the classroom. The data collected and analyzed are used to measure the growth, identify needs, and inform new benchmarks and goals for the program.

Highlights from the AY 2023-2024 OA Reports illustrate NTID's outcomes assessment data collection, analysis processes, and results. In addition to the individual program findings summarized below, it should be noted that every student received overall positive evaluations on co-op employer assessments, with 100% being appraised as demonstrating effective job performance in terms of aptitude, quick learning, and the application of technical knowledge, a result that is considered to be outstanding.

NTID implemented changes to the general education framework specifically designed for students in the Associate of Occupational Studies (AOS) programs. This involved replacing two Career English sequence courses with two AOS general education electives. Although AOS students are not typically required to take general education courses, this change allows them to benefit from additional electives tailored to their AOS degree, providing greater flexibility and enhancing their academic experience.

Academic Program Highlights (continued)

Departments offering AOS programs collaborated closely with the Associate Dean of Curricular Affairs to develop diverse courses that satisfy general education requirements while integrating essential business communication skills critical for employment. Additionally, during AY 2023-2024, NTID's Department of Liberal Studies worked diligently to streamline its English curriculum, ensuring alignment with these enhancements and supporting student success.

ASL and Interpreting Education (ASLIE)
- **ASL-English Interpretation BS:** Performance exceeded expectations on two out of the three assessed outcomes this year. In the Interpreting II: ASL to English course, 88% of students received ratings of satisfactory or higher for their overall ability to simultaneously interpret from ASL to English. In the same course, 86% of students received ratings of satisfactory or higher for their overall ability to simultaneously interpret from English to ASL. Shifting focus to the Practical & Ethical Applications course, the program made proactive improvements by offering faculty training on program-level outcomes assessment, incorporating Learning Assistants in all course sections, and introducing a hybrid delivery model to enhance student support. To better assess ethical reasoning, they plan to shift the evaluation to a later course, such as the Practicum, where students have more opportunities to apply these principles in real-world situations.
- **Health Care Interpretation MS:** Similar to the previous year, this year's results indicate that students exceeded expectations on all four course-based outcomes and achieved the program assessment criteria. All students, without exception, received a rating of satisfactory or higher for their independent investigation on a topic related to their interests, specifically within the realms of research and science. They effectively summarized their findings in both academic ASL and English. Additionally, every student earned satisfactory grades on their two empirical projects. Results from the graduate satisfaction survey reveal that, once again, 100% of graduates expressed satisfaction with the program and acknowledged its positive impact on advancing their careers, aligning with last year's rating of 100%.

Business Studies
- **Accounting Technology AAS:** Exceeded the benchmark for five outcomes in the current year. The program evaluated the outcomes being assessed and made some changes to reflect the currency of the program requirements. New courses were created and assessments for those courses will begin in academic year 2024-2025. Students exceeded a level of satisfactory performance on their co-op activities with 100% being assessed as exhibiting satisfactory job performance in terms of aptitude, quick learning, and the application of technical knowledge.
- **Administrative Support Technology AAS:** Students exceeded the benchmark in two direct course-based assessments and met the benchmark for one additional outcome. All students demonstrated strong typing skills, achieving a satisfactory rating of 40+ net words per minute with no more than five errors. The curriculum changes have already begun and are being piloted this fall 2024. These updates include more current software, assignments, and projects, aiming to enhance student learning and better alignment with industry trends. In addition to their academic achievements, all students received positive evaluations from their co-op supervisors, highlighting their ability to quickly learn, apply technical knowledge, and transfer theory to real-world job situations. Furthermore, 100% of students who actively sought employment after graduation successfully secured positions.
- **Business Administration AAS:** Six benchmarks were exceeded, while two outcomes were not achieved. Specifically, the outcomes associated with the Essentials of Business Communications that was not met last year, were met this year, indicating an improvement in classroom strategies and clear assignment expectations. Similar to last year, students in Fundamentals of Marketing are expected to participate in a project that forces them to apply marketing concepts in real-world scenarios. Students fell short with completing this project, however, it has been recommended that the project continue to be divided up in components using a scaffolding approach. Despite these challenges, all outcomes linked to the co-op supervisor's assessment of overall performance and technical skills were exceeded.
- **Business AS:** Criteria were exceeded for three out of the four outcomes, while one other outcome fell short. Every student, without exception, demonstrated appropriate interpersonal

business skills and teamwork. In the Managerial Accounting course, five out of six students achieved a score of at least 70% on their Learning Assessment Test, showcasing their proficiency in performing the functions of the accounting cycle for service, merchandising, and manufacturing businesses. The Business AS Program made the decision to replace assessing global Business Environment with Principles of Marketing focusing solely on allowing the program to evaluate courses taught under their purview. This change occurred last academic year and data is still being collected. The BS program at the Saunders College of Business admitted all two students who graduated and applied for admission to their program.

- **Business Technology AOS:** All students achieved satisfactory ratings on the e-Portfolio rubrics, resulting in a 100% success rate. However, similar to last year's assessment, the benchmarks for the Integrated Document Productions "Ten 5-minute Timed Writings" and the Fundamentals of Marketing Project were not met. The Integrated Document Production course has since been deactivated, and this assessment will be replaced by a project in the Advanced Document Productions course to better align with current trends. Additionally, other courses were updated to maintain the program's relevance to industry standards. On a positive note, all students received satisfactory performance ratings from their co-op supervisors, who praised their ability to quickly learn, apply technical knowledge, and transfer theory to real-world situations. Furthermore, every student who sought employment after graduation successfully secured a position.

Engineering Studies

- **Applied Mechanical Technology AAS:** Benchmarks were exceeded for two outcomes and achieved for two outcomes. In the Mechanical Design and Fabrication course, students exceeded expectations in receiving a grade of C or better on the final project but did not meet the criteria for receiving a grade of C or better on the written test. One hundred percent of students earned the required grades in key courses, preparing them to apply for enrollment in RIT's MCET BS program. This reflects an increase from the previous year's 75%. As a result, the department continues to re-evaluate the assessment method. Final grades are currently being assessed.

- **Architectural and Civil Drafting Technology AOS/AAS:** All but one benchmark were exceeded for identifying issues related to sustainability in the construction industry. The benchmarks were surpassed in tasks such as preparing student portfolios, engaging productively in a collaborative team project, completing the final project in the Advanced Construction course, and performing in the final exam in Construction Materials and Methods II class. Benchmarks related to technical drawing practical assignments were met. In the one course where the benchmark was not met extenuating circumstances affected the data. Regarding co-op placements, 100% of students received satisfactory overall ratings from their supervisors. Overall, students remain highly satisfied with the program.

- **Precision Manufacturing Technology AOS:** Criterion levels were exceeded for six outcomes and achieved for six assessed outcomes, reflecting an improvement from the previous year when only two outcomes were exceeded. All benchmarks were successfully met, including those related to using CAD/CAM software, observing and practicing industry safety rules and regulations, utilizing precision measuring instruments and computers for quality control, writing comprehensive inspection reports, identifying characteristics of various industrial materials, producing machined parts and optical elements to exact specifications, and developing skills and knowledge for the safe operation of conventional machines and tools, among other automatic equipment. Faculty members have transitioned to a "Learning-Focused" approach, emphasizing student-centered teaching. By making this change, students have shown tremendous improvement. One hundred percent of students received positive evaluations from their co-op supervisors, and all students successfully passed their final exam in the PMT IV course.

- **Civil Technology AAS:** This year, the benchmark for satisfactory completion of the Strength of Materials course was not achieved as the course was not offered. There were other outcomes that were met and exceeded. The students in Engineering Graphics and Civil Technology Graphics successfully completed their final exam focusing on Technical Drawing. There were no eligible students among the Civil Technology AAS graduates for acceptance into the RIT Civil Engineering Technology BS program this year as they are continuing their studies in the AAS program. Despite these circumstances, 100% of students expressed satisfaction with the program on their satisfaction survey.

Academic Program Highlights (continued)

Information and Computing Studies
- **Applied Computer Technology AS:** The criteria for completing tasks, including drivers and application programs, as well as demonstrating fundamental programming and web skills, were successfully met this year. However, data collection remains challenging due to modifications made by the Golisano College of Computing and Information Systems (GCCIS) to their programs, which have subsequently impacted our program. These changes were essential to ensure alignment with evolving industry standards.
- **Applied Computer Technology AOS/AAS**: The findings revealed that benchmarks were met or exceeded for all 13 assessed outcomes, showcasing the program's strong overall performance. Notably, 95% of students successfully restored a PC to working condition and completed hands-on projects related to HelpDesk support. Additionally, 86% of students passed their final technical presentation evaluation. While this reflects a slight decrease from last year's 92%, the program remains committed to excellence. Faculty members are actively implementing changes to enhance the program, focusing on providing students with even more valuable experiential learning opportunities and equipping them for future success.
- **Mobile Application Development AAS:** No findings were obtained this year as there were no enrolled students in courses corresponding to the outcomes. The department will continue to focus on action items throughout academic year 2024-2025.

Liberal Studies
- **Applied Liberal Arts AS:** In one writing course, 100% of students successfully passed the written English competency, reflecting an improvement from the previous year's assessment. In another writing course, the sample size was statistically small (n=6), with 66% passing, which led to the program not meeting the benchmark for that course. Despite this, the curriculum changes in the developmental English sequence have proven effective, as most students are now better prepared for placement in Critical Reading & Writing and Writing Seminar.
- **Community Development and Inclusive Leadership BS:** This marks the second year of reporting outcomes for the program. Of the eight evaluated outcomes, three were not met, primarily due to discrepancies in course outcomes caused by variations in instruction across semesters. As the program is still in its early stages, efforts are actively underway to refine data collection and assessment processes, ensuring continuous improvement and alignment with program goals.

Master of Science in Secondary Education
- **Master of Science in Secondary Education of Students who are Deaf or Hard of Hearing**: All 11 learning outcomes assessed in 2023-2024 were successfully met, an improvement from the previous year when two outcomes fell short. One hundred percent of students demonstrated proficiency across nine areas of dispositions, up from 93% the previous year. Additionally, 97% of teacher candidates passed the Sign Language Proficiency Interview (SLPI) at an intermediate level or higher and/or the American Sign Language Proficiency Interview (ASLPI) with a score of 2.5 or higher, reflecting a slight increase from last year's 96%. While 91% of students received a satisfactory grade on their micro-teaching assignment—down from the previous year's perfect 100%—the program continues to excel in preparing students for real-world teaching experiences. One of its core strengths remains the emphasis on self-reflection activities, which play a crucial role in fostering professional growth and readiness.

Science and Mathematics
- **Laboratory Science Technology AOS/AAS:** Of the eight assessed general skills and technical competency areas, employment, and placement benchmarks, all were exceeded except for three criteria. Upon reviewing the unmet benchmarks, it was determined that curricular adjustments are needed to provide students with additional resources to better prepare for assignments, exams, and lab work. This should not be seen as a negative outcome but rather as an opportunity to adapt teaching methods in response to changes in the student population and their evolving needs. In the Quantitative Instrumental Analysis course, all students passed the course exam after the instructor implemented a new teaching approach during AY 2023-2024. This adjustment resulted in students successfully grasping concepts and applying them effectively on the exam.

Furthermore, outcomes related to performing the final laboratory project in the Analytical Chemistry course and executing proteomic and genomic manipulation techniques were once again exceeded this year. To ensure a more comprehensive evaluation of students' understanding, it has been suggested that additional assessments in alternate formats be introduced. These would aim to reinforce quality control concepts and minimize misunderstandings related to assignments. Enhancing student comprehension through these curricular changes is a key focus moving forward. Notably, all survey respondents expressed satisfaction with the overall program. The department remains committed to continuously evaluating the course sequence to further strengthen the program and its outcomes.

- **General Science AS:** Now in its fifth year of outcomes assessment, the program demonstrated strong progress, with four benchmarks met and five falling short. Notably, 80% of students passed the college-level algebra final exam, reflecting a significant improvement from the previous year's 76%. In General & Analytical Chemistry II, only 33% of students earned a grade of C or better, falling short of the 80% benchmark. While tutoring support for this course is encouraged, participation remains optional. Despite this, all students excelled in General & Analytical Chemistry I lab activities and final exams, showcasing strong foundational skills. Of the 12 students in the program, six were eligible to graduate during the assessed academic year. Among them, one successfully graduated, one is on track to graduate in five semesters instead of four, and four students are eligible to graduate in the 2024-2025 academic year. Impressively, every graduate from the program has been or will be accepted into RIT's BS programs, underscoring the program's success in preparing students for advanced academic opportunities.

Visual Communications Studies
- **Design and Imaging Technology AOS/AAS:** Two outcomes were assessed this year, while other assessments were not conducted due to "no findings." Every student (100%) met the criteria for creating a portfolio, writing a cover letter, composing a resume, and performing in interviews. Faculty plan to convene to review the portfolio assessment standards and consider whether stricter expectations should be set to ensure alignment with industry standards. The goal is to enhance the overall quality and relevance of the portfolio assessment.
- **3D Graphics Technology AAS:** The program was put on hold three years ago, and no data was collected this year. However, the program resumed in academic year 2024-2025.

Communication, Audiology and Speech-Language:
- It is noteworthy that the Email Communication outcome has not met the 80% criteria for two consecutive years. While the recommendation has been made to monitor this area, it is unclear who will be responsible for monitoring it or how this will be implemented. The data for this outcome comes from Co-op Supervisors' Forms, and we have been tracking it for some time. Given the current trend, there is concern that this issue may persist.

These individual, program-specific assessments demonstrate that NTID faculty members in all departments are actively engaged in identifying the aspects of their curricula that are preparing students well but also those areas where the program faculty have self-identified a desire to improve based on measurable criteria. This process shows that the NTID faculty are not only continuously reflective on the content of their curriculum but also responsive to the needs of stakeholders, including students, instructors, co-op supervisors, and future employers. The overall exemplary evaluations provided by student's co-op supervisors shows that NTID's programs are preparing students well for the world of work and that faculty are focused on continuous improvement to ensure that students are meeting and exceeding goals.

Enrollment by Degree Programs

In fall 2024, 56% of NTID's 1,176 students were enrolled in a broad array of programs within NTID. Forty-four percent were enrolled in other colleges of RIT, including 82 students in graduate programs. Of the 1,176 students, 982 are deaf and hard-of-hearing students, including 51 students in the MSSE program. In fall 2024, 47% (463/982) of NTID's deaf and hard-of-hearing students were enrolled in NTID programs, and 53% (519/982) were enrolled in the other programs at RIT. Students are categorized by their primary academic college.

	Number of Students
NTID Career Exploration Studies	
Career Exploration (UND)	7
Career Prep Foundation (UND)	4
Subtotal	**11**
NTID Career-Focused	
Applied Computer Technology (AAS)	18
Applied Computer Technology (AOS)	21
Architectural and Civil Drafting Technology (AAS)	5
Architectural and Civil Drafting Technology (AOS)	3
Business Technology (AOS)	25
Design and Imaging Technology (AAS)	47
Design and Imaging Technology (AOS)	40
Engineering Technologies (UND)	1
Laboratory Science Technology (AOS)	13
Precision Manufacturing Technology (AOS)	29
Subtotal	**202**
Associate+Bachelor's Degrees	
3D Graphics Technology (AAS)	9
Accounting Technology (AAS)	7
Administrative Support Technology (AAS)	5
Applied Computer Technology (AS)	24
Applied Liberal Arts (AS)	26
Applied Mechanical Technology (AAS)	18
Business (AS)	15
Business Administration (AAS)	24
Civil Technology (AAS)	2
General Science (AS)	13
Laboratory Science Technology (AAS)	29
Mobile Application Development (AAS)	4
Subtotal	**176**

	Number of Students
NTID ASL-English Interpretation	
ASL-English Interpretation (BS)	152
Health Care Interpretation (MS)	10
Subtotal	**162**
Other NTID Undergraduate Programs	
Community Development and Inclusive Leadership (BS)	7
Subtotal	**7**
NTID Master of Science in Secondary Education (MSSE)	
Secondary Education of Students who are Deaf or Hard of Hearing (MS)	84
Subtotal	**84**
NTID Pre-Baccalaureate Students	
Pre-Baccalaureate Engineering (UND)	8
Pre-Baccalaureate Science (UND)	3
Pre-Baccalaureate Visual Communication (UND)	4
Subtotal	**15**
NTID Subtotal	**657**
Undergraduate Students in Other RIT Colleges	
College of Engineering Technology	
Civil Engineering Technology (BS)	16
Computer Engineering Technology (BS)	9
Electrical Engineering Technology (BS)	4
Engineering Technology Exploration (UND)	3
Environmental Sustainability, Health and Safety (BS)	2
Mechanical Engineering Technology (BS)	24
Mechatronics Engineering Technology (BS)	6
Robotics Manufacturing Engineering Technology (BS)	1
Subtotal	**65**

	Number of Students
Saunders College of Business	
Accounting (BS)	8
Business Exploration (UND)	5
Finance (BS)	4
Global Business Management (BS)	3
Hospitality & Tourism Management (BS)	2
Management Information Systems (BS)	7
Marketing (BS)	7
Subtotal	**36**
College of Science	
Applied Mathematics (BS)	2
Applied Statistics and Data Analytics (BS)	1
Biochemistry (BS)	1
Biology (BS)	3
Biotechnology and Molecular Bioscience (BS)	4
Chemistry (BS)	4
Computational Mathematics (BS)	1
Environmental Science (BS)	5
Imaging Science (BS)	1
Neuroscience (BS)	3
Physics (BS)	1
Subtotal	**26**
College of Art and Design	
3D Digital Graphics (BFA)	4
Film and Animation (BFA)	12
Graphic Design (BFA)	10
Illustration (BFA)	8
Industrial Design (BFA)	4
Interior Design (BFA)	6
Medical Illustration (BFA)	2
Motion Picture Science (BS)	2
New Media Design (BFA)	6
Photographic Arts and Sciences Exploration (UND)	1
Photographic and Imaging Arts (BFA)	4
Studio Arts (BFA)	8
Studio Art Exploration (UND)	1
Subtotal	**68**

	Number of Students
College of Liberal Arts	
Advertising and Public Relations (BS)	4
Communication (BS)	1
Criminal Justice (BS)	8
Economics (BS)	1
English (BS)	5
History (BS)	3
Humanities, Computing, and Design (BS)	4
Liberal Arts Exploration (UND)	2
Political Science (BS)	3
Psychology (BS)	16
Public Policy (BS)	1
Sociology and Anthropology (BS)	3
Subtotal	**51**
Kate Gleason College of Engineering	
Biomedical Engineering (BS)	6
Chemical Engineering (BS)	2
Computer Engineering (BS)	8
Electrical Engineering (BS)	3
Engineering Exploration (UND)	4
Industrial Engineering (BS)	3
Mechanical Engineering (BS)	20
Microelectronic Engineering (BS)	1
Subtotal	**47**
B. Thomas Golisano College of Computing and Information Sciences	
Computer Science (BS)	18
Computing Exploration (UND)	1
Computing and Information Technologies (BS)	19
Cybersecurity (BS)	11
Game Design and Development (BS)	14
Human-Centered Computing (BS)	3
New Media Interactive Development (BS)	3
Software Engineering (BS)	10
Web and Mobile Computing (BS)	3
Subtotal	**82**

	Number of Students
School of Individualized Study	
Applied Arts and Sciences (BS)	38
University Exploration (UND)	1
Subtotal	**39**
College of Health Sciences and Technology	
Biomedical Sciences (BS)	12
Diagnostic Medical Sonography (BS)	6
Exercise Science (BS)	3
Physician Assistant (BS)	2
Subtotal	**23**
Subtotal Undergraduate Students in Other Colleges	**437**
Graduate Students in Other RIT Colleges	
College of Engineering Technology	
Construction Management (MS)	1
Environmental Health and Safety Management (MS)	1
Manufacturing and Mechanical Systems Integration (MS)	3
Subtotal	**5**
Saunders College of Business	
Business Administration (MBA)	11
Business Administration On-line	1
Hospitality Business Management (MS)	1
Subtotal	**13**
College of Art and Design	
Film and Animation (MFA)	3
Fine Arts Studio (MFA)	2
Visual Communication Design (MFA)	3
Subtotal	**8**

	Number of Students
College of Liberal Arts	
Communication (MS)	2
Criminal Justice (MS)	1
Experimental Psychology (MS)	4
Subtotal	**7**
College of Science	
Applied Statistics (MS)	1
Astrophysical Science & Technology (MS)	1
Bioinformatics (MS)	2
Environmental Science (MS)	4
Mathematical Modeling (PhD)	2
Subtotal	**10**
Kate Gleason College of Engineering	
Computer Engineering (MS)	1
Electrical Engineering (MS)	1
Lean Six Sigma (ACT)	1
Mechanical and Industrial Engineering (PhD)	1
Mechanical Engineering (ME)	1
Mechanical Engineering (MS)	1
Sustainable Engineering (MS)	1
Subtotal	**7**
B. Thomas Golisano College of Computing and Information Sciences	
Computer Science (MS)	5
Computing and Information Science (PhD)	1
Data Science (MS)	3
Game Design and Development (MS)	1
Health Informatics (MS)	1
Human Computer Interaction (MS)	3
Information Technology and Analytics (MS)	1
Software Engineering (MS)	3
Subtotal	**18**

	Number of Students
College of Health Science and Technology	
Dietetics and Nutrition (MS)	1
Health Systems Management (MS)	2
Health and Well-Being Management (MS)	1
Subtotal	**4**
School of Individualized Study	
Professional Studies (MS)	5
Project Management (MS)	1
Subtotal	**6**
Golisano Institute for Sustainability	
Architecture (MArch)	2
Sustainable Systems (MS)	1
Subtotal	**3**
Non-Degree Student (NONG)	1
Subtotal	**1**
Subtotal Graduate Students in Other Colleges	**82**
Total	**1,176**

Legend	
AAS	Associate of Applied Science
ACT	Advanced Certificate
AOS	Associate of Occupational Science
AS	Associate of Science
BFA	Bachelor of Fine Arts
BS	Bachelor of Science
CT	Certificate
MArch	Master of Architecture
MBA	Master of Business Administration
ME	Master of Engineering
MFA	Master of Fine Arts
MS	Master of Science
MST	Master of Teaching
NON/NONG	Non-Degree
PhD	Doctor of Philosophy
UND	Undeclared

Average Class Size by Discipline

The variability in average class size is influenced by the nature of instruction. For example, many programs are laboratory oriented and use specialized equipment, which limits the number of students who can reasonably be accommodated in a class. Data does not include cooperative education, independent study, or research sections.

	AY 2023-2024	
	Fall	**Spring**
3D Graphics Technology	7.0	2.0
Accounting Technology	8.2	6.3
Administrative Support Technology	6.5	6.1
Applied Computer Programming	8.2	4.0
Applied Computer Technology – Technical Computing	6.4	5.6
ASL-English Interpretation	10.2	7.9
Career Development	11.3	10.8
Communication Studies	9.8	11.2
Community Development and Inclusive Leadership	11.5	9.0
Computer-Aided Drafting Technology	3.8	1.3
English	13.2	8.9
General Business	6.3	7.2
General Engineering Studies	8.0	8.3
General Visual Communications	8.3	8.3
Graphic Design	8.4	9.7
Graphic Production	5.7	6.5
Health Care Interpretation	5.3	5.3
Humanities & Social Sciences	32.0	7.0
Laboratory Science Technology	8.7	8.1
Liberal Studies	13.0	21.0
Master of Science in Secondary Education	9.4	9.3
Mathematics	10.4	10.6
Mobile Application Development	2.0	N/A
Performing Arts	14.3	13.5
Precision Manufacturing	6.7	4.9
Science	9.1	8.1
Sign Languages	7.8	9.0
Overall Average	**9.5**	**8.5**

Educational Support: Teaching

In addition to providing academic advisement, tutoring, and notetaking services for deaf and hard-of-hearing students enrolled in the other colleges of RIT, NTID faculty also teach some RIT courses with deaf students enrolled. By providing direct instruction in these courses, as well as advisement and tutoring, faculty members help maximize the benefit students receive to ensure their success in RIT's highly competitive academic environment. Below are the statistics for FY 2024 credit-bearing courses.

	Number of Sections	Number of Students	
		Deaf or Hard-of-Hearing	Hearing
Saunders College of Business			
Computer-Based Analysis	7	14	79
Subtotal	**7**	**14**	**79**
College of Art and Design			
Digital Bootcamp	1	0	7
The Fine Print Workflow	2	0	16
Subtotal	**3**	**0**	**23**
College of Engineering Technology			
MMSI Capstone Project	1	1	0
Subtotal	**1**	**1**	**0**
College of Liberal Arts			
Advanced American Sign Language I	1	0	4
Advanced American Sign Language II	1	1	2
American Deaf History	1	15	16
Beginning American Sign Language I	12	7	167
Beginning American Sign Language II	10	8	122
Beginning Spanish IA	1	1	9
Communication	1	14	0
Creative Writing Workshop	1	2	17
Deaf Culture in America	1	9	23
Deafness and Technology	1	13	19
Developmental Psychology	1	10	0
Diversity in Deaf Community	1	17	15
Intermediate American Sign Language I	6	13	64
Intermediate American Sign Language II	3	7	14
Introduction to Criminal Justice	2	24	0
Introduction to Psychology	2	26	2
Linguistics of American Sign Language	2	7	36
Science, Technology, and Values	1	11	0
Thesis Proposal	2	2	0
Women and the Deaf Community	2	7	19
Subtotal	**52**	**194**	**529**

	Number of Sections	Number of Students	
		Deaf or Hard-of-Hearing	Hearing
College of Science			
Advanced Chemistry Research	2	2	0
Applied Calculus	1	4	0
Introduction to Statistics I	6	31	102
Organic Chemistry Lab I	4	4	72
Organic Chemistry Lab II	2	0	35
Research and Thesis	4	0	10
Solar System Astronomy Lab	3	1	38
Stars and Galaxies Lab	3	1	47
Survey Design and Analysis	1	0	11
Subtotal	**26**	**43**	**315**
Interdisciplinary Studies			
Critical Reading and Writing	4	67	0
Multidisciplinary Life	3	12	47
Writing Seminar	6	78	1
Subtotal	**13**	**157**	**48**
Golisano College of Computing & Information Sciences			
Software Development and Problem Solving II	1	8	0
Web & Mobile I	2	1	53
Subtotal	**3**	**9**	**53**
Total	**105**	**418**	**1,047**

American Sign Language and Interpreting Education Programs

The ASL-English Interpretation bachelor degree program graduated 32 students, and the Health Care Interpretation master's degree program graduated four students in AY 2023-2024.

Forty-five new students matriculated into the bachelor degree program in September 2024. Currently, 27% of total enrollment are students from ethnic minority backgrounds.

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Fall Applicants*	135	146	103	112	111
Accepted	71	74	58	66	66
Registrations	48	48	41	42	45
Enrollment					
BS	170	168	144	144	152
MS in Health Care Interpretation	11	13	12	11	10
Total Enrollment	**181**	**181**	**156**	**155**	**162**
Employment Report					
Graduates					
BS	30	44	29	32	**
MS in Health Care Interpretation	5	4	8	4	**
Employment Rate	100%	100%	100%	**	**

In addition to the interpreting program, ASL and Interpreting Education faculty also provided the following:	FY 2024 Enrollment
ASL courses in RIT's College of Liberal Arts	498
ASL courses for deaf students, NTID	57
New Signers Program, NTID	18
Total	**573**

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* Fall application data only includes the ASL-English Interpretation bachelor degree program. The Health Care Interpretation program admits students in the summer term.

** As of the writing of this report, the employment information for FY 2024 and FY 2025 and graduation information for FY 2025 is incomplete.

Master of Science in Secondary Education of Students who are Deaf or Hard of Hearing (MSSE)

The MSSE program is now in its 30th year. One hundred percent of the FY 2023 graduates are employed throughout the country.

To complete the program, each student must successfully complete 94 credit hours, including two student-teaching assignments and a master's project.

In addition to the coursework and other expectations, all full-time students serve as graduate assistants during the semesters they are not student teaching. They work as teaching assistants, program assistants, research assistants, or tutors, primarily at NTID.

To recruit students with strong content area backgrounds, especially in science and math, the program has implemented a 4+2 program with RIT's College of Science, Kate Gleason College of Engineering, and College of Liberal Arts as well as RIT's School of Individualized Study.

Sixty-five applications for admission for fall 2024 were received. Fifty-one were offered admission. Of those, 38 matriculated into the program. For AY 2024-2025, the MSSE program has a total enrollment of 84 students: 46 returning students and 38 first-year students. Of the 84 matriculated students, 61% are deaf or hard of hearing and 34% are minority.

MSSE Student Data

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Fall Applications	31	40	54	53	65
Acceptances	31	36	49	47	51
New Registrations	21	28	38	36	38
Deaf and Hard-of-Hearing Enrollment	20	37	40	39	51
Total Enrollment	**34**	**56**	**72**	**82**	**84**
Employment Report					
Graduates	6	19	28	33	*
Employment Rate	100%	100%	100%	*	*

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*   As of the writing of this report, the employment information for FY 2024 and FY 2025 and graduation information for FY 2025 is incomplete.

Cooperative Work Experiences

Cooperative work experience is an integral part of academic programming at NTID. Employment specialists assist students in securing cooperative work experiences that augment their studies. Most academic programs require from one to three cooperative assignments, which generally add another year to the program length (totaling three years for associate degree programs and five years for bachelor's degree programs).

During FY 2024, 178 students were enrolled in cooperative work experiences, and 53 academic programs had students on cooperative work experiences.

Number of Students Involved in Cooperative Work Experiences*					
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Sub-Baccalaureate					
NTID	47	57	48	58	45
Percent of Total Co-op Enrollment	26%	26%	23%	28%	25%
Baccalaureate/Master's					
College of Engineering Technology	21	38	38	47	25
Saunders College of Business	27	23	16	12	14
B. Thomas Golisano College of Computing and Information Sciences	32	43	56	40	53
Kate Gleason College of Engineering	22	17	24	23	21
College of Health Sciences and Technology	0	3	2	0	2
College of Art and Design	16	9	2	7	5
College of Liberal Arts	16	20	20	15	9
College of Science	0	8	3	2	1
Interdisciplinary SOIS					3
Subtotal	134	161	161	146	133
Percent of Total Co-op Enrollment	74%	74%	77%	72%	75%
Total Co-op Enrollment	**181**	**218**	**209**	**204**	**178**

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* Totals reported include deaf and hard-of-hearing international students, but do not include students in the ASL-English Interpretation program, the Master of Science program in Health Care Interpretation, or the Master of Science program in Secondary Education. Specific data on these students is reported elsewhere in this section.

Student Support Services

NTID students have access to audiological services, speech and language services, mental health counseling, career counseling, academic advising, professional academic tutoring, self-advocacy training, wellness activities, substance abuse services, and more.

Student Support Services Highlights

NTID provides a variety of services to support the college success of deaf and hard-of-hearing students:

- Audiological services are provided by the Communication Studies and Services (CSS) department. CSS includes eight audiologists trained to provide hearing evaluations, consultations, hearing aid trials and programming, cochlear implant mapping and upgrades, assistive technology and accessory fittings, and individual listening and speechreading therapies that focus on the development of receptive communication skills. RIT students, faculty, and staff, NTID-supported alumni, and adults enrolled in RIT's Osher Lifelong Learning Institute have access to these services and can make appointments in The Audiology Center. In addition, audiologists are available to meet to troubleshoot and repair hearing aids and cochlear implants with no appointment required. The facility is equipped with state-of-the-art computer-based technology, training software, and a variety of accessories and assistive devices that are available for demonstration. CSS audiologists stay current with ongoing training and maintain close working relationships with representatives from cochlear implant and hearing aid manufacturers to satisfy the ever-evolving needs of a diverse student population. CSS Audiology also offers routine ear, nose, throat, and ophthalmology clinics for students on campus to meet with local physicians. CSS providers are prepared to match individuals' communication preferences: sign language, voice, or both.

- Speech and language services are provided by the Communication Studies and Services (CSS) department. CSS includes five speech-language pathologists trained to provide clinical services for deaf and hard-of-hearing students who want to enhance their communication competence and confidence. Individual, group, and walk-in experiences aim to improve students' communication for face-to-face conversations, remote conversations, group discussions, job interviews, and formal presentations. Speech-language services are designed to meet students' personal goals and can focus on a variety of areas such as speech intelligibility (articulation, pronunciation, voice, prosody), spoken language, grammar and technical/professional vocabulary and practice, communication strategies for work-related interactions, speechreading and listening training, presentation skill development, and increased self-confidence when communicating. The Speech & Language Center is equipped with computer technology that provides students with visual feedback for speech and language analysis. Students can also explore new methods of communication practice and facilitation through the use of trending mobile apps and virtual reality equipment. CSS providers are prepared to match individuals' communication preferences: sign language, voice, or both.

- Mental health therapy services are provided to deaf, hard-of-hearing, and hearing students on campus at RIT's Counseling & Psychological Services (CaPS). Mental health counselors fluent in American Sign Language or therapists working with interpreters provide services for d/Deaf and hard-of-hearing students. CaPS, in collaboration with the Student Health Center, also provides psychiatry services for medication consultation. Mental health crisis intervention is available 24 hours a day. In addition to individual therapy services, students can participate in group therapy and skill-building workshops with CaPS staff. In AY 2023-2024, 192 d/Deaf and hard-of-hearing students were seen for CaPS services.

- Personal and career counseling and academic advising. NTID Counseling & Academic Advising Services (CAAS) supports the academic, personal, and career growth of all NTID-supported students. CAAS services include, but are not limited to:

  Academic Advising: CAAS provides developmental and proactive advising to help students navigate degree requirements and achieve on-time graduation.

  Transitional Counseling: CAAS serves as a confidential site to help students address personal concerns and access resources.

  Career Counseling: CAAS administers and reviews career assessments to help students identify interests and skill sets.

Student Support Services Highlights (continued)

Freshman Seminar: CAAS acts as facilitators for a first-year course to help students transition to the RIT community through experiential opportunities and dialogue models.

Title IX Confidential site: CAAS serves as a Title IX confidential resource for students who have experienced sex or gender discrimination, sexual misconduct, sexual harassment, sexual assault, stalking, and dating and domestic violence (also known as intimate partner violence).

CAAS collaboratively works with the RIT community to prioritize diverse, inclusive, and equitable services, and partners with campus resources and community services to enhance student experiences. RIT's University Advising Office, Office of Financial Aid and Scholarships, NTID Student Financial Services, Department of Access Services, Disability Services Office, academic departments, vocational rehabilitation counselors, and families also support student success and retention.

CAAS prioritizes antiracism and social justice initiatives through facilitation of White Affinity and Counseling & Academic Advising Diversity & Inclusion (CAADI) focus groups. These groups help CAAS deepen understanding of racism and identify strategies for leading anti-racist and social justice practices in their work with students and the greater RIT community.

The Student Life Team (SLT) continued its tradition in FY 2024 of both challenging and educating students by providing resources and support for students' successful transitions throughout college and after graduation. SLT's collaborations with NTID's Counseling and Academic Advising Services, the NTID Co-op and Career Center, NTID Student and Academic Services, Department of Public Safety, and several offices across RIT's Division of Student Affairs ensured that students were provided diverse opportunities to optimize their collegiate experience.

SLT's avenues of outreach and connection with students include: co-curricular and late-night educational programming, spiritual/religious and civility exploration workshops, self-advocacy and community accountability mentoring programs, social and cultural programs, fraternity and sorority event collaborations, and club/organization advising.

In addition to the wide variety of programming that SLT offers, the team serves as a source of information for the NTID student community through its strong social media presence, which is used to communicate important events and activities. SLT hires student staff during the summer who provide significant support to the Outreach Consortium (summer programs) and Summer Vestibule Program (SVP), as well as offers year-round positions to students during the academic year who work with SLT to provide activities, events, and mentoring programs that support students. SLT strives to build a sense of community that allows students to feel at home and that they are part of something great.

- Student Wellness/NTID Student and Academic Services provides instruction and services that support wellness education. Deaf and hard-of-hearing students are ensured opportunities for exploring, developing, and implementing wellness concepts, principles, and behaviors in their lives. It is important to ensure deaf and hard-of-hearing students receive a holistic education with a focus on career, academic, emotional, social, physical, spiritual, financial, and environmental dimensions of wellness. Wellness initiatives occur through collaboration within many different areas of NTID and RIT. Students participated in wellness instructional classes, wellness presentations in freshman seminar classes, weekly "Wellness Wednesday" programs that address different topics, presentations in residence halls, Red Barn activities, intramural programs, institute workshops, and personal mentoring.

- The NTID Athlete Development Program serves as a key resource for deaf and hard-of-hearing students engaged in athletics. The program encompasses four main avenues: NCAA athletics, club sports, intramural activities, and wellness classes. Additionally, it oversees the NTID Deaf Basketball Association and Deaf Volleyball Association, two prominent leagues within the NTID community.

Student Support Services Highlights (continued)

As a central point of contact, the program supports students interested in sports and other physical activities.

NTID Athlete Development plays a pivotal role in organizing large-scale, community-oriented events, including Deaf Culture Night with the Rochester Red Wings baseball team, ASL Night with RIT Men's Hockey, Deaf Awareness Day with the New York Yankees, and TigerFest for NTID students. These events highlight the program's commitment to fostering a sense of community and cultural pride through sports, enabling NTID students to thrive both on and off the field.

- Financial aid for domestic students was provided in FY 2024 to NTID students in the form of Vocational Rehabilitation awards, grants-in-aid, federal and state grants, scholarships, and federal loans through RIT's Financial Aid and Scholarships Office. In all, 725 students received NTID scholarships, 245 received RIT scholarships, 940 received NTID-endowed scholarships, and 96 received scholarships from external funding sources. In addition, the NTID Financial Services Office provided privately funded short-term loans to students who encountered emergency situations.

- Summer Vestibule Program (SVP) is an orientation program for students entering NTID that is designed to transition them to college life. In 2024, 152 students went through the orientation program. Assessment tests are given to further evaluate a student's academic placement for English and mathematics classes. Students were given an opportunity during the summer months, prior to their arrival on campus, to chat with their accepted program's department chairperson to confirm their program/major of interest. If after discussion the student realizes that another program is a better fit for them, they are introduced to that program's department chairperson to change their major/program. Components of the SVP program were conducted online via Zoom with interpersonal interaction via SMS, e-mail, videophone, Facebook, and online meetings, prior to their arrival on campus. Once on campus, deaf and hard-of-hearing students were given intensive workshops on Deaf community/culture, diversity/inclusion, drug/alcohol programming, dating/relationships, and social events. There also was ample opportunity for peer interaction and fun. SVP is a memorable experience as students create bonds and make friends, while beginning their collegiate career.

- First Year Experience incorporates a freshman seminar required for incoming first-year students and is designed to further assist them in their transition to RIT/NTID. Twelve sections were offered with an average class size of 12 students in fall 2024. A variety of topics are covered, such as navigating the campus, library resources, Student Information System (SIS), conflict resolution, time management, clubs/organizations, study skills, stress management, goal setting, healthy relationships, and more. This is another opportunity for students to connect with their instructor if they have personal/academic struggles and use their instructor as a resource.

- Career Exploration Studies (CES) is a program that gives career-undecided students the opportunity to explore technical programs while satisfying necessary core and/or prerequisite coursework. During AY 2023-2024, CES served 23 students in the fall and 12 students in the spring.

- Substance and Addiction Intervention Services for the Deaf (SAISD) provides culturally sensitive and linguistically accessible information on alcohol, tobacco, and other drugs. In addition, it offers intervention and prevention services to the deaf and hard-of-hearing community at RIT, and throughout Rochester and the Monroe County area. SAISD also advocates for and promotes development of a full range of accessible treatment programs for alcohol and other drugs for deaf and hard-of-hearing consumers through the provision of cross-disability short-term technical assistance, consultation, and training for professionals. Because of its success, SAISD consults on replicating its model across New York State whenever possible.

Support Services: Tutoring Hours

NTID faculty provide academic assistance in the form of tutoring for all NTID-supported deaf and hard-of-hearing students registered in the other colleges and degree-granting units of RIT.

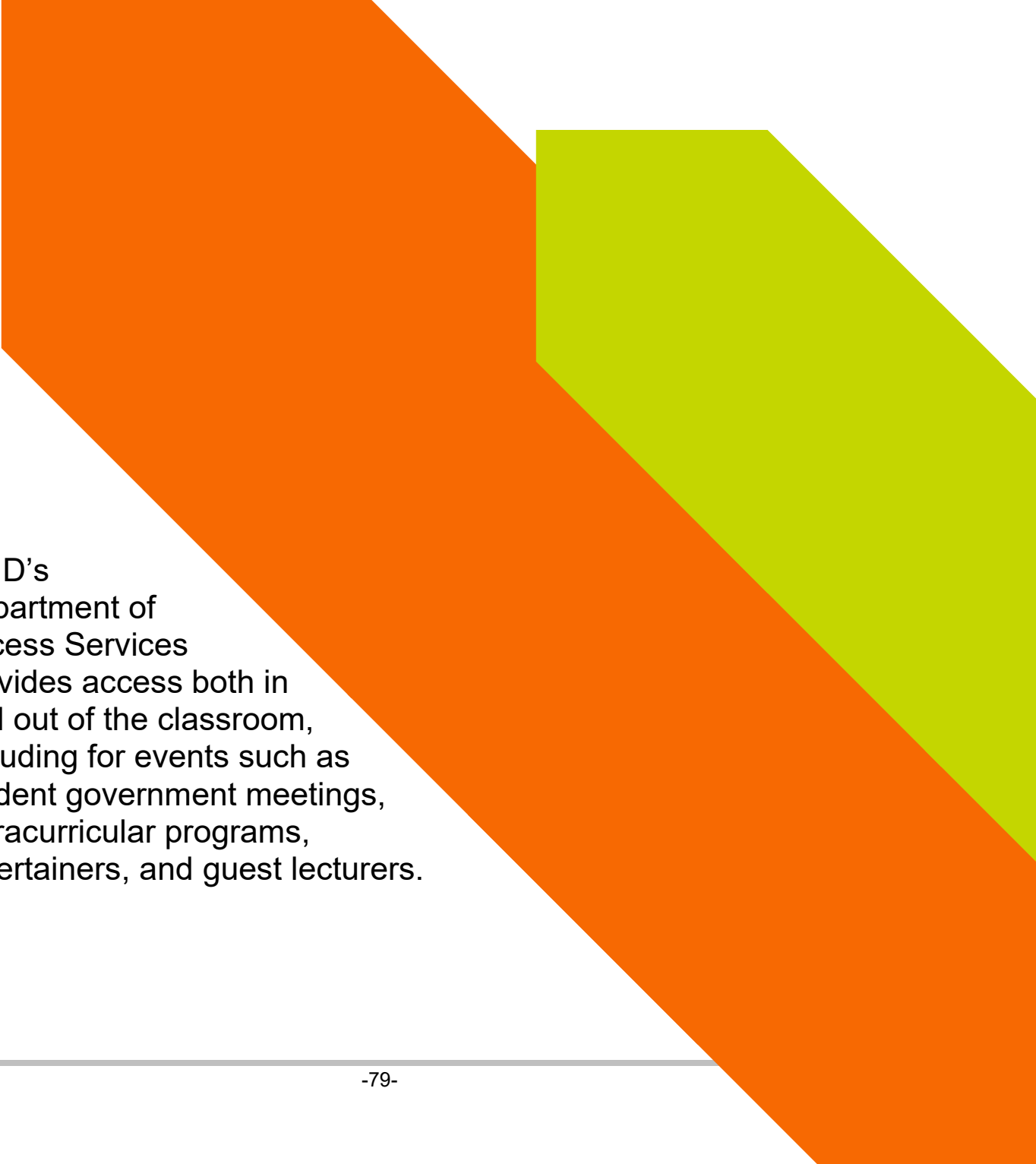|	AY 2023-2024		
	Tutoring Hours	Class Sections Served	Total Student Registrations
College of Engineering Technology (CET)	*	233	551
College of Art and Design (CAD)	1,550	407	752
Saunders College of Business (SCB)	850	128	385
Kate Gleason College of Engineering (KGCOE)	1,122	157	231
College of Liberal Arts (CLA)	465	447	1,331
College of Health Sciences and Technology (CHST)	340	118	251
College of Science (COS)	2,754	427	1,219
B. Thomas Golisano College of Computing and Information Sciences (GCCIS)	823	281	597
School of Individualized Study (SOIS)	**	62	255
Golisano Institute for Sustainability (GIS)	***	1	1
Total	**7,904**	**2,261**	**5,573**

*   Hours for CET are reported under SCB, KGCOE, COS and GCCIS.
**   Hours for SOIS are reported under the other colleges depending on the course type.
*** Hours for GIS are reported under KGCOE.

Student Access Services

NTID's Department of Access Services provides access both in and out of the classroom, including for events such as student government meetings, extracurricular programs, entertainers, and guest lecturers.

Student Access Services Highlights

NTID provides access services to meet the needs of a large number of deaf and hard-of-hearing students enrolled in baccalaureate and graduate degree programs in RIT's other colleges and degree-granting units as well as students enrolled in NTID programs who take courses in the other colleges and degree-granting units of RIT. Access services are also provided in NTID-instructed classes when needed. Services are provided for non-academic events and activities throughout the RIT community, making RIT the world's most accessible university, with the largest staff of professional interpreters and real-time captionists of any college program in the world. Educational access services that NTID offers for deaf and hard-of-hearing students at RIT include:

- **Sign language interpreting** provided by 129 staff members, as well as freelance, protégé, apprentice, and student interpreters. Students also may request interpreters for non-academic activities such as athletic events, religious services, student government meetings, student clubs, and guest presentations.
- **Real-time captioning** provided as a real-time access service for students who benefit from English text. A staff of 59 real-time captionists is trained in a computer-assisted system developed for transcribing in real time what teachers and students say in class. Increasing use of remotely provided captioning helps us meet growing demand. Real-time captioning also is provided for special events, student meetings, clubs, and guest presentations as well as other out-of-classroom needs.
- **Classroom notetaking services** are provided by more than 490 trained student notetakers, one of the largest contingents of student employees on campus. Notes are uploaded to a website for easy access by deaf and hard-of-hearing students.
- **Captioned classroom video materials.** NTID, in conjunction with RIT, provides captioned video materials for use in classrooms and on video streams of RIT events.
- **Assistive Listening Systems.** NTID loans FM systems to students in classrooms.

NTID works with each of RIT's colleges and degree-granting units to provide support for implementing strategies that maximize access to services for deaf students in full compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act for educational accommodation. The institutional position on accessibility for deaf and hard-of-hearing people includes the following strategies, for which NTID provides support:

- Sharing responsibility for providing workshops, training, and information to assist faculty in the other RIT colleges in effectively teaching deaf and hard-of-hearing students.
- Providing training and ensuring that academic and administrative service areas that interact with students have staff with a range of communication skills and strategies (sign language, computer terminal, or other written interaction) to communicate effectively with deaf students.
- Ensuring that all audio and visual media produced or used at RIT are effectively captioned, and that existing materials used in classrooms are captioned whenever possible.
- Encouraging RIT to advocate for the captioning of audio and visual materials, teleconferences, and other educational media produced externally to RIT.

NTID was an early innovator in access services, initiating training programs for educational interpreters in the 1970s. Staff interpreters have built careers with specialized expertise across the diverse technologies of RIT's curriculum. This resource, paired with similar expertise with real-time captioning services, which began in the 1990s, offers NTID students unparalleled access to the full array of educational opportunities RIT provides.

Capitalizing on its staff's expertise, Access Services strengthened the onsite development of staff interpreters and real-time captionists with expanded professional development efforts. The growth of a formalized apprentice program already has benefited 173 developing interpreters from 33 discrete training programs in transitioning from school to effective professional interpreting. Of the 173 NTID apprentices, 57 have been hired by NTID into staff interpreting positions.

Student Access Services Highlights (continued)

The Randleman Program, which hires up to 10 novice interpreters of color into a two-year mentorship program, is the only program of its kind in postsecondary education. The expertise of NTID interpreters as specialists in post-secondary education increasingly is being shared through national outreach, including via the NTID Regional STEM Center, by improving skills of interpreters in STEM disciplines. With increasing retirements of veteran staff, Access Services hired approximately 38% of its current staff of 188 access providers in recent years.

Interpreting and captioning are provided for all major campus events. Above, mother and daughter team Gina Coyne and Brittany Sauers, both NTID interpreters, interpret chants and songs for an RIT hockey game.

Access Services: Interpreting, Real-Time Captioning, and Notetaking

Interpreting, real-time captioning, and notetaking services are provided to allow deaf and hard-of-hearing students equal access to information in classes at other RIT colleges and NTID, when necessary.

RIT College	Interpreting Hours	Real-Time Captioning Hours	Notetaking Hours	Class Sections Served
College of Art and Design	20,147	2,666	7,601	360
College of Engineering Technology	5,969	1,512	3,520	202
College of Health Sciences and Technology	3,339	1,768	2,191	78
College of Liberal Arts	13,817	5,504	9,557	371
College of Science	14,159	4,533	11,015	391
B. Thomas Golisano College of Computing and Information Sciences	8,579	3,733	5,872	260
Golisano Institute for Sustainability	1	0	0	0
School of Individualized Study	1,628	294	627	52
Kate Gleason College of Engineering	2,952	2,103	2,675	132
NTID	9,363	660	503	170
Saunders College of Business	6,900	2,074	4,545	177
Student Affairs Division	2,445	97	224	114
FY 2024 Total Hours	**89,299**	**24,944**	**48,330**	**2,307**

Access Services: Interpreting Services

In-class services include interpreting support in all colleges of RIT as well as student/professor meetings, field trips, and other activities when required for credit-bearing courses. Non-class services include student use of interpreting services in student government, other student organizations, study abroad, judicial proceedings, emergency situations, and extra-curricular programs. Administrative use includes support for RIT faculty/staff activities, such as visiting presenters, conferences, and presentations for faculty, staff, and audiences.

FY 2024	In-Class			Non-Class Activity		Administrative Activity		Overall Total	
	Hours	%*	Sections						
Fall	44,654	74%	753	11,308	19%	4,508	7%	60,470	100%
Spring	43,453	75%	706	10,557	18%	4,315	7%	58,325	100%
Summer	1,192	9%	30	8,493	61%	4,234	30%	13,919	100%
FY 2024 Total	**89,299**	**67%**	**1,489**	**30,358**	**23%**	**13,057**	**10%**	**132,714**	**100%**
FY 2014 Total**	99,173	75%	1,660	26,223	20%	6,659	5%	132,055	100%
FY 2015 Total	105,983	76%	1,739	27,196	19%	7,051	5%	140,230	100%
FY 2016 Total	112,110	75%	1,797	29,105	20%	7,831	5%	149,046	100%
FY 2017 Total	108,243	71%	1,644	33,854	22%	10,533	7%	152,630	100%
FY 2018 Total***	96,463	71%	1,634	30,051	22%	9,572	7%	136,036	100%
FY 2019 Total	100,270	69%	1,608	31,850	22%	13,164	9%	145,284	100%
FY 2020 Total	82,576	70%	1,555	23,034	19%	12,630	11%	118,240	100%
FY 2021 Total	82,474	70%	1,563	23,013	20%	12,344	10%	117,831	100%
FY 2022 Total	91,075	69%	1,471	28,703	22%	12,399	9%	132,176	100%
FY 2023 Total	86,535	69%	1,405	25,679	21%	12,350	10%	124,564	100%

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*   Percentages are rounded to the nearest whole number.
**   Reduced number of sections and hours required in FY 2014 resulted from RIT's move to a semester-based academic calendar.
***   A revised class meeting schedule, only in AY 2017-2018, resulted in both reductions of demand from one fewer week of class each term and an undercount of hours, estimated at 8-10%, due to forced changes in counting methods. AY 2018-2019 returned to NTID's previous standard method of counting hours.

Access Services: Real-Time Captioning Services

Increasing demand for real-time captioning, support is being allocated to increase the supply of real-time captioning. Students who benefit from a text-based service may request real-time captioning as their means of real-time access. Real-time captioning is provided via specialized software allowing the provider to type in shortcuts, thus captioning what the speaker says in real-time. Captioning is used in classroom and other settings on campus such as student clubs, activities, meetings, and presentations, in order to support equal access for deaf and hard-of-hearing students.
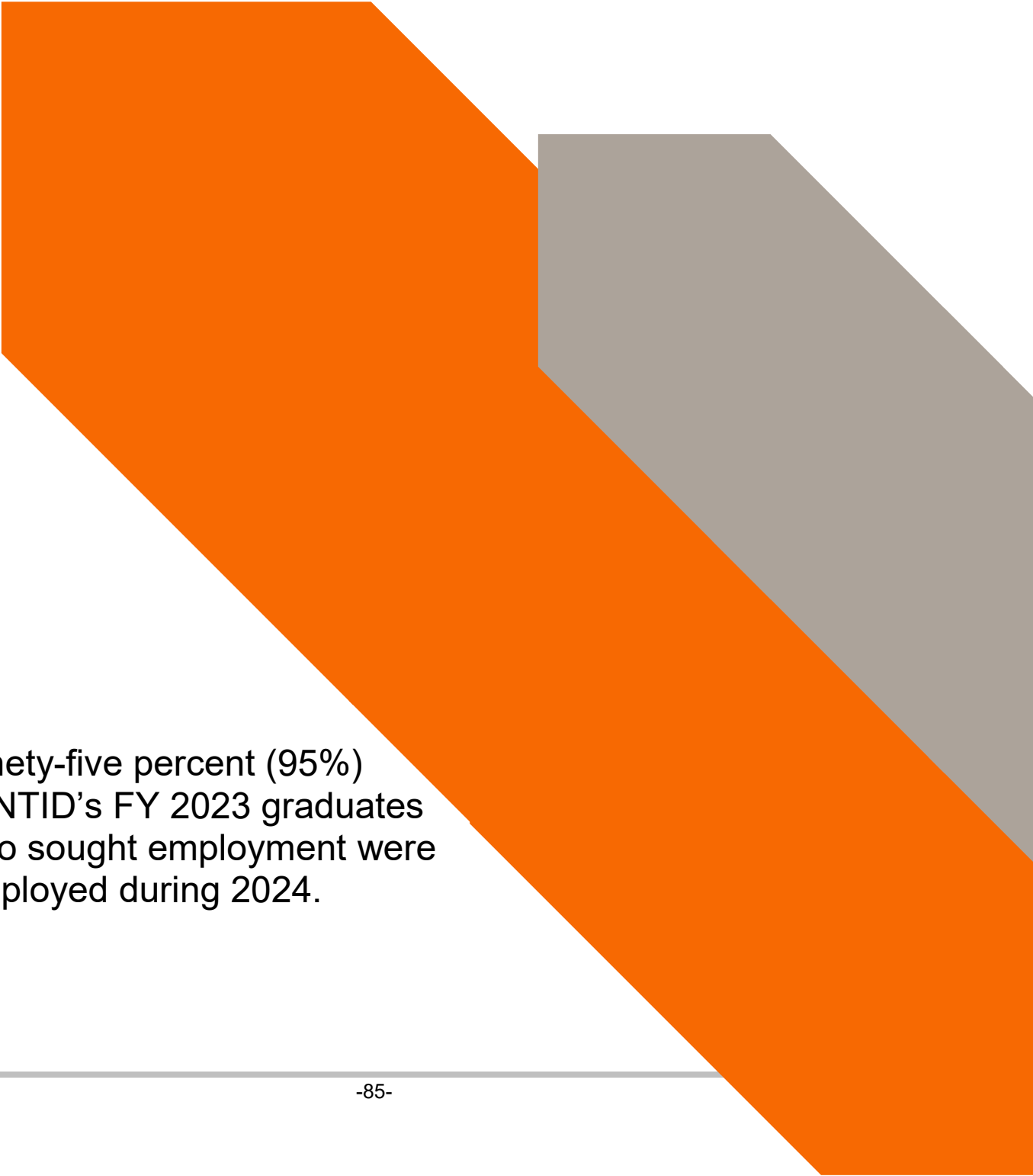
FY 2024	In-Class			Non-Class Activity		Administrative Activity		Overall Total	
	Hours	%*	Sections						
Fall	12,738	95%	406	399	3%	308	2%	13,445	100%
Spring	12,077	97%	369	339	3%	82	0%	12,498	100%
Summer	129	20%	6	342	53%	176	27%	647	100%
FY 2024 Total	**24,944**	**94%**	**732**	**1,080**	**4%**	**566**	**2%**	**26,590**	**100%**
FY 2014 Total**	21,140	98%	489	351	2%	110	1%	21,601	100%
FY 2015 Total	21,459	96%	509	630	3%	122	1%	22,211	100%
FY 2016 Total	23,081	96%	625	939	3%	315	1%	24,335	100%
FY 2017 Total	24,608	95%	642	800	3%	544	1%	25,952	100%
FY 2018 Total***	22,532	95%	642	846	4%	222	1%	23,600	100%
FY 2019 Total	23,154	89%	669	2,401	9%	423	2%	25,978	100%
FY 2020 Total	20,501	94%	729	961	4%	394	2%	21,856	100%
FY 2021 Total	25,235	91%	883	1,946	7%	563	2%	27,744	100%
FY 2022 Total	28,051	87%	866	3,823	12%	443	1%	32,317	100%
FY 2023 Total	26,270	95%	732	1,056	4%	308	1%	27,634	100%

*   Percentages are rounded to the nearest whole number.
**   Reduced number of sections and hours required in FY 2014 resulted from RIT's move to a semester-based academic calendar.
***   A revised class meeting schedule, only in AY 2017-2018, resulted in both reductions of demand from one fewer week of class each term and an undercount of hours, estimated at 8-10%, due to forced changes in counting methods. AY 2018-2019 returned to NTID's previous standard method of counting hours.

Persistence, Graduation, and Employment

Ninety-five percent (95%)
of NTID's FY 2023 graduates
who sought employment were
employed during 2024.

Persistence, Graduation, and Employment Highlights

Preparing deaf and hard-of-hearing students to live and work in the mainstream of society is the primary reason NTID was established in 1965. Prior to 1965, there were few postsecondary educational opportunities for deaf and hard-of-hearing students and virtually none in technical studies. As a result, nearly 85% of deaf adults in the early 1960s found themselves in unskilled or semi-skilled jobs.

Today, NTID's highly successful academic programs and services are leading graduates to successful careers in a broad range of fields. Over the past five years, 95% of graduates who chose to enter the labor force found employment that is commensurate with the level of their education and training. Figures for 2023 graduates show that 95%, or 98 of the 103 students who chose to enter the workforce, found employment.

These statistics reflect the quality of an NTID education and its value. According to a study conducted by NTID with the Social Security Administration (SSA) in 2013, deaf and hard-of-hearing graduates from NTID far out earn those graduating from other institutions of higher education. Specifically, at age 50, $58,000 is the median salary for deaf and hard-of-hearing individuals graduating from NTID with a bachelor's degree, which is $17,000 more than those graduating from NTID with an associate degree, and $37,000 more than those graduating from other institutions of higher education. NTID deaf and hard-of-hearing graduates also experience higher rates of employment over their lifetimes than those graduating from other institutions of higher education.

Quality employment and higher earnings have been shown to correlate with graduation from college. Generally, students who withdraw before graduation fare no better earnings-wise than their peers who never went to college. With this in mind, NTID employs a variety of innovative strategies to improve persistence. All first-year students take a Freshman Seminar, which undergoes continuing curriculum revisions to better address the challenges that these students experience. Students who appear to have a higher risk of attrition during their first year are identified and work closely with their Freshman Seminar instructor, counselor/academic advisor, and academic chairperson. NTID requires all first-year students to meet with their counselor/academic advisor to review their program requirements, identify courses for the following semester, and review their individual plan of employment that was developed with their vocational rehabilitation (VR) counselor, if receiving VR support, and plan of study for degree completion.

NTID is committed to addressing retention issues that impact students' persistence from first-year transition through graduation. Staff from different divisions within NTID's Student and Academic Services continue to focus on students' academic and social success through different strategies. These strategies include annually offering the Deaf ALANA Promise (DAP) program for first-year African, Latino and Native American (ALANA) students, providing support for students through the financial aid and vocational rehabilitation process, facilitating students' well-being and mental health needs through NTID Counseling and Psychological Services (NCaPS), analyzing exit interview results from NTID's Counseling and Academic Advising Services, examining other institutional systems that promote student retention, and identifying strategies to increase the retention of NTID transfer students.

Persistence is a continuing concern for NTID. However, NTID's first-year retention and overall graduate rates continue to exceed national averages when compared to hearing students in associate and bachelor's degree programs in other colleges and universities. Notwithstanding these positive comparisons, NTID continues to work at improving its persistence to graduation rate.

For AY 2023-2024, 294 degrees were awarded. Of those, 27% were sub-baccalaureate degrees, 51% were bachelor's degrees, and 22% were graduate degrees. Forty-six percent of graduates were students from minority backgrounds.

First-Year Persistence Rates

Since there is variability from year to year in terms of persistence rates for entering cohorts of students, NTID monitors and reports annually on persistence using a three-year moving average. The table below presents information about three-year moving averages for first-time, full-time, degree-seeking NTID-supported undergraduate students. Thus, the most recent three-year average is reported for the 607 students who were first-time, full-time, degree-seeking in the years 2021, 2022, and 2023. Data in the table below indicate that for the most recent three-year period, 77% of new students persisted to the second year. Disaggregated rates can be found on the following page.

First-Year Persistence Rates*			
Three-Year Entry Cohort	Number in Cohort	Number Registering Second Year	Overall Persistence Rate
2012, 2013, 2014	814	623	77%
2013, 2014, 2015	779	596	77%
2014, 2015, 2016	731	553	76%
2015, 2016, 2017	702	509	73%
2016, 2017, 2018	649	504	78%
2017, 2018, 2019	609	438	72%
2018, 2019, 2020	597	439	74%
2019, 2020, 2021	604	457	75%
2020, 2021, 2022	609	460	76%
2021, 2022, 2023	607	466	77%

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* Three-year averages for first-time, full-time, undergraduate degree-seeking students registering for fall term. Students in the ASL-English Interpretation program are not included.

Persistence, Graduation, and Employment

Persistence and Graduation Rates for Deaf and Hard-of-Hearing Students

Nationally, four-year public and private colleges have a first-year persistence rate of 81%. This compares to an 85% persistence rate for first-year NTID students across four-year degree programs. The table below also indicates that NTID's graduation rates (48% for students admitted into sub-baccalaureate programs and 72% for those in bachelor-level programs) are much higher than public colleges with traditional or selective admission standards.

National and NTID Persistence and Graduation Rates		
Colleges	**First-Year Persistence Rate***	**Graduation Rate***
Two-Year Institutions	63%	34%
NTID Sub-Baccalaureate**	**71%**	**48%**
Four-Year Institutions	81%	65%
Other RIT Colleges (NTID Baccalaureate)**	**85%**	**72%**

Class of '24 NTID graduates celebrate their accomplishments at Commencement in May 2024.

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*   Source of national estimates: nces.ed.gov
**   NTID calculates first-year persistence and graduation rates using a three-year moving average.

Degrees Granted: FY 2020 to FY 2024

During the past five years, NTID has awarded an average of 280 degrees annually. The number for FY 2024 was 294. In FY 2024, 46% of graduates were students from minority backgrounds.

Eight different degree levels are eligible to be awarded to NTID-supported students at RIT.

1. An *Associate in Occupational Studies* (AOS) degree requires 45-52 semester credit hours of technical instruction and permits students to enter their careers directly upon graduation. In addition to completing technical courses satisfactorily, students must complete 15 semester credit hours in the NTID general education curriculum, as well as other required semester credit hours determined by their program of study.

2. An *Associate in Applied Science* (AAS) degree permits students to enter their careers directly upon graduation, or in many cases, to transfer to a baccalaureate program in the other colleges of RIT. Completion of this degree requires 48-52 semester credit hours of technical instruction. In addition to the technical courses, students must complete 24 semester credit hours in general education courses, primarily offered through RIT's College of Liberal Arts as well as other required credit hours as determined by their program of study.

3. The *Associate in Science* (AS) degree is an associate+bachelor's degree for students seeking admission to bachelor-level studies. This degree requires completion of 60-63 semester credit hours, half of which must be from liberal arts and sciences; the rest are from technical and professional areas.

4. A *Certificate* is awarded to students who complete all required undergraduate courses within an applicable program. NYSED does not stipulate a minimum number of credit hours for a Certificate; however, RIT programs typically consist of at least nine semester credit hours.

5. A *Bachelor's* degree is awarded to students who complete all required courses to graduate from a four- or five-year program in one of RIT's nine colleges. A bachelor's degree requires completion of 120-128 semester credit hours.

6. An *Advanced Certificate* is awarded to students who complete all required graduate courses within an applicable program. NYSED does not stipulate a minimum number of credit hours for an Advanced Certificate; however, RIT programs typically consist of at least 12 semester credit hours.

7. A *Master's* degree is awarded to students who complete all required courses to graduate from a two- or three-year graduate program in one of RIT's nine colleges. The credit requirements vary among programs, but a minimum of 30 semester credit hours at the graduate level is required.

8. A *Doctor of Philosophy* (PhD) degree is awarded to students who complete all courses, research, examinations, defense of dissertation and submission of a final accepted dissertation to graduate from a program within one of RIT's other eight colleges. The credit requirements vary among programs, but a minimum of three years of full-time study and 60 semester credit hours at the graduate level, with at least 18 credit hours of research, are required.

Persistence, Graduation, and Employment
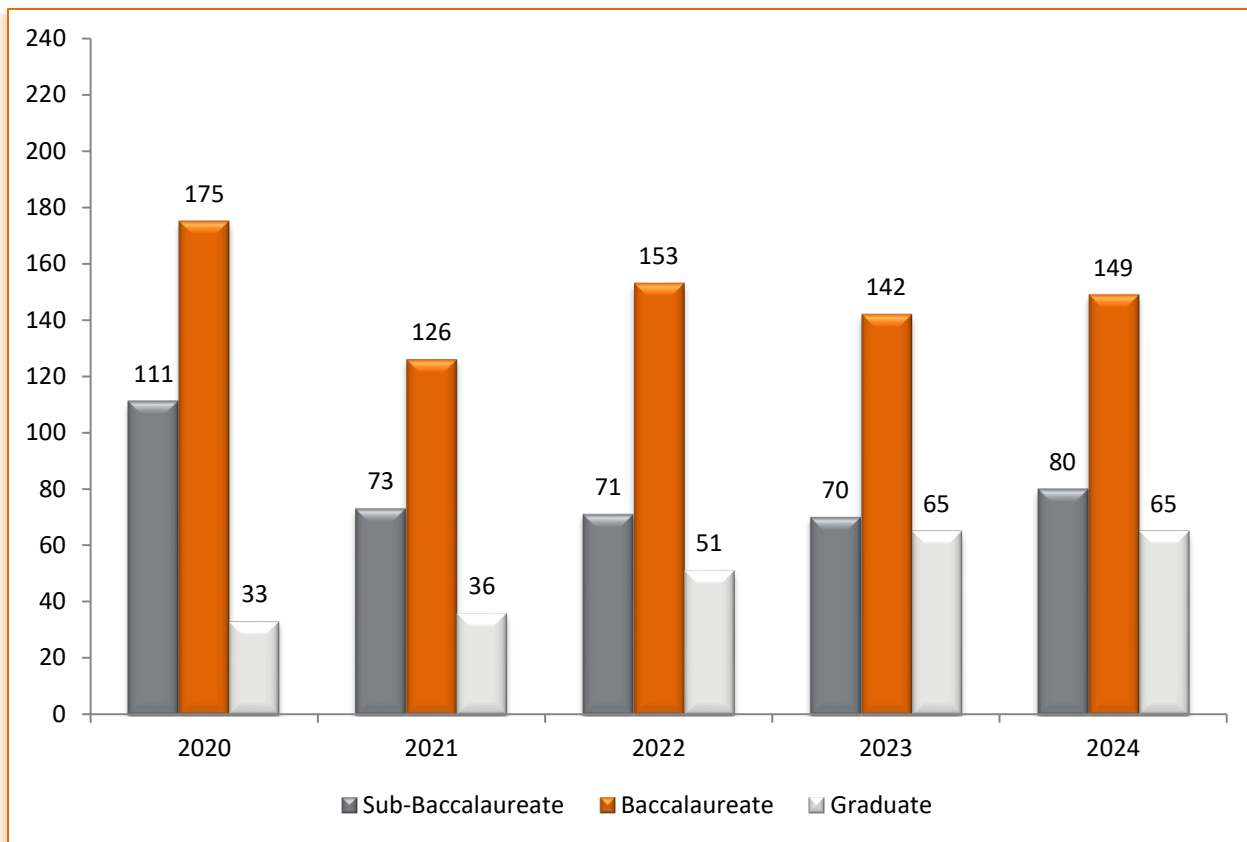
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Sub-Baccalaureate	34.8%	31.1%	25.8%	25.3%	27.2%
Baccalaureate*	54.9%	53.6%	55.6%	51.3%	50.7%
Graduate**	10.3%	15.3%	18.6%	23.4%	22.1%

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*   This number includes certificates and graduates from the ASL-English Interpretation programs.
**   This number includes deaf and hard-of-hearing graduates from RIT, as well as graduates from the Master of Science program in Secondary Education and hearing graduates from the Master of Science program in Health Care Interpretation.

Graduates by Program Areas

Of all the degrees awarded to NTID students on the RIT campus in FY 2024, 53% were through programs offered by NTID and 47% through the other colleges of RIT.

Data on minority status of these graduates appear in the Diversity and Inclusion section.

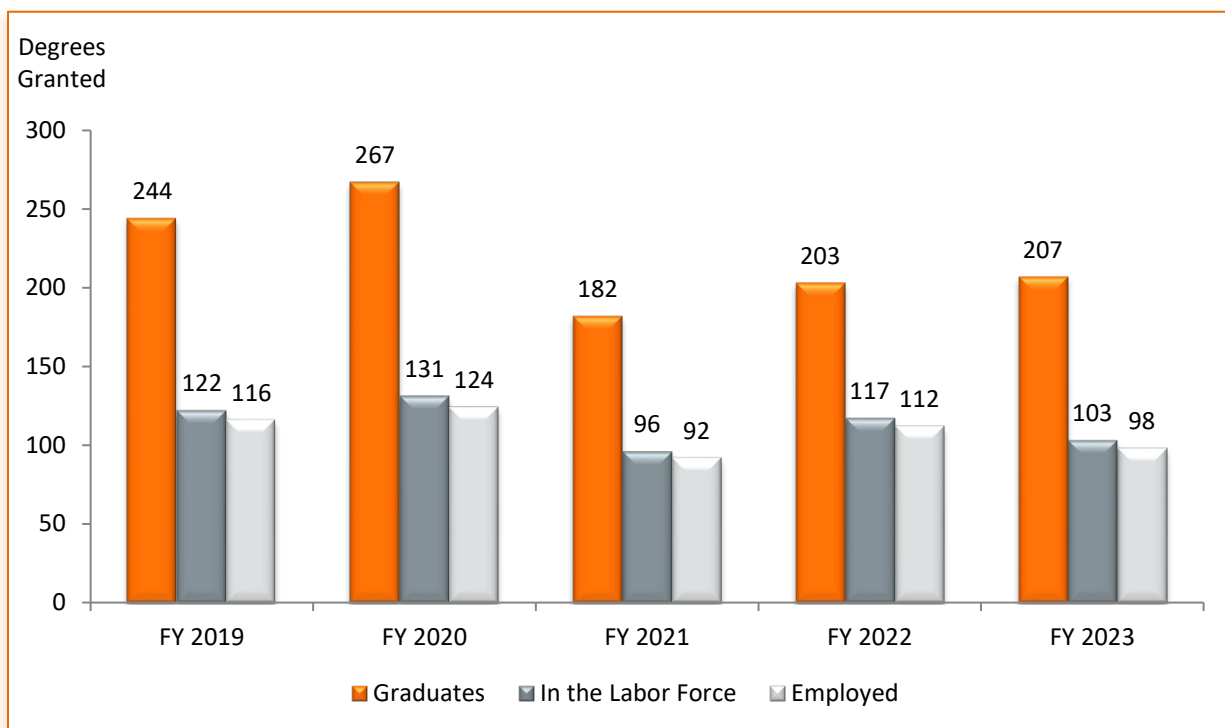|	Number of Graduates	Percentage of Graduates
NTID		
Career-Focused and Associate+Bachelor's Degrees	81	29%
ASL-English Interpretation	32	11%
Master of Science in Health Care Interpretation	4	1%
Master of Science in Secondary Education	33	12%
Subtotal NTID	**150**	**53%**
Other Colleges of RIT[*]		
College of Engineering Technology	11	4%
Saunders College of Business	21	7%
B. Thomas Golisano College of Computing and Information Sciences	18	6%
Golisano Institute for Sustainability	0	0%
Kate Gleason College of Engineering	7	2%
College of Health Sciences and Technology	11	4%
College of Art and Design	19	7%
College of Liberal Arts	24	8%
College of Science	11	4%
School of Individualized Study	13	5%
Subtotal Other Colleges	**135**	**47%**
Total	**285**	**100%**

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* Includes bachelor's and master's degrees granted by the other colleges of RIT, as well as some associate degrees.

Persistence, Graduation, and Employment

Graduation and Employment for Recent Graduates

Employment rates are calculated using the methodology of the Bureau of Labor Statistics (BLS) in its Current Population Survey (household survey), which provides information on the labor force, employment, and unemployment. As the BLS defines it, "The civilian labor force is the sum of employed and unemployed persons. Those not classified as employed or unemployed are not in the labor force. The unemployment rate is the number unemployed as a percent of the labor force. The labor force participation rate is the labor force as a percent of the population... "

NTID's labor force is the sum of those graduates who are employed and those who want to be employed. Those who do not want to be employed because they choose to continue to pursue bachelor's and master's degrees at RIT or at some other institution of higher education, or choose to become homemakers, or to be idle temporarily while traveling, etc., are not in the labor force. During FY 2023*, 207** deaf and hard-of-hearing students graduated, and 103 chose to enter the labor force. Ninety-eight were employed, while five were unable to find employment. Therefore, 95.14% (98/103) found employment. NTID's employment rate over the past five years as calculated above is 95%. Of the 104 remaining graduates from 2023, 77 are continuing their education toward advanced degrees either at RIT or elsewhere, eight are not looking for employment, and 19 have an unknown status.

Degrees Granted

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Graduates	244	267	182	203	207
In the Labor Force	122	131	96	117	103
Employed	116	124	92	112	98

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* As of the writing of this report, the employment information for 2024 is incomplete; therefore, NTID reports employment rates of 2023 graduates.
** Students are only counted once in the case of multiple degrees, and the total number of graduates does not include degrees in the ASL-English Interpretation program, the Master of Science program in Secondary Education, the Master of Science program in Health Care Interpretation, or any certificates awarded.

Employment Services for Deaf and Hard-of-Hearing Students and Graduates

Prior to students' cooperative work experiences, NTID Co-op and Career Center (NCCC) meets with students to support student learning about how to organize and conduct job search activities. Students utilize an extensive NCCC website and print resources to research prospective employers, identify appropriate employment opportunities, and obtain information about applying for a job and working. During the academic year, employment advisors provide job-seeking advice to students and graduates through Zoom, email, text, and videophone.

During FY 2024:

- **Guest Presentations**: NCCC personnel were invited as guest speakers across various technical and academic programs to discuss the job search process.

- **Solar Turbines Training Academy**: In October 2023, two faculty members and three engineering students traveled to San Diego, California, to participate in the Solar Turbines Training Academy. The students gained valuable real-world engineering experience through a case-study project.

- **NTID Career Fair**: In October 2023, the career fair hosted 34 employers and was attended by 237 students and alumni.

- **Disability:IN Conference**: As part of the conference in Las Vegas, Nevada, two students participated in the Next Gen Leaders program. They were paired with mentors from corporate partners across industries, including Dow Chemical, Boeing, Lilly, Fidelity, Lockheed Martin, and Northrop Grumman.

- **Alumni Consultation**: NCCC provided job search assistance and employment opportunities to 35 alumni throughout the year.

- **Workshops and Events**: NCCC hosted Resume Review and Practice Interview sessions in both the fall and spring semesters. Additionally, NCCC organized a LinkedIn Photoshoot and Ice Cream Social event.

- **Workforce Recruitment Program**: NCCC coordinated the Workforce Recruitment Program, where 36 students had the opportunity to participate in interviews.

Heriberto Almonte Medina, an administrative support technology major from Brooklyn, New York, networks with hiring managers at NTID's Career Fair.

Where Recent Graduates Are Working

In FY 2023, 48% of U.S. NTID graduates accepted jobs in their home states as their first jobs after graduation, while 18% found employment in the Roch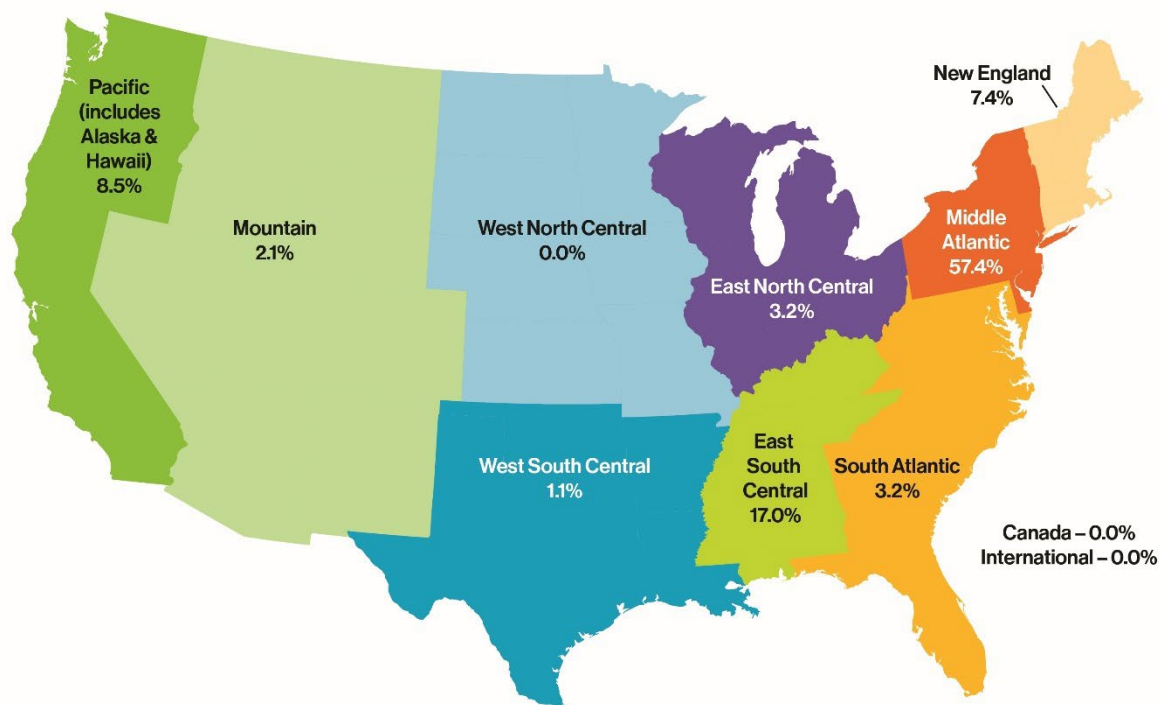ester area and 34% in other areas of the country. The majority of graduates are employed in the eastern parts of the country, areas that have been strong sources of applicants for NTID.

	Percent of Employed Graduates				
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Area					
Rochester	28%	15%	11%	23%	18%
Home State	36%	56%	65%	52%	48%
Other	36%	29%	24%	25%	34%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Number of Graduates Employed	**116**	**124**	**92**	**112**	**98**

FY 2023 Graduate Employment by Region**

Pacific (includes Alaska & Hawaii) 8.5%
Mountain 2.1%
West North Central 0.0%
East North Central 3.2%
New England 7.4%
Middle Atlantic 57.4%
West South Central 1.1%
East South Central 17.0%
South Atlantic 3.2%
Canada – 0.0%
International – 0.0%

Employment by Sector of the Economy

Of the last cohort of graduates tracked for employment, 78% have acquired jobs in business and industry,13% in education/non-profit, and 9% in government.

Sector	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Business/Industry	77%	72%	67%	67%	78%
Education/Non-Profit	16%	21%	25%	24%	13%
Government	7%	7%	8%	9%	9%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Keyazsha Ashford, a design and imaging technology major from York, Pennsylvania, and Nadaa Nafiisa, a design and imaging technology major from Java, Indonesia, assess co-op and employment opportunities at NTID's Career Fair.

Persistence, Graduation, and Employment

Occupations of Recent Graduates: Entry Status by Labor Category

The following table reports on the occupations of employed alumni using the Standard Occupational Coding system (SOC) used by the U.S. Department of Labor. Occupations are grouped into 13 categories. Percentages among the various categories are different than seen in the *FY 2023 Annual Report*. This year shows moderate changes over many occupational categories.

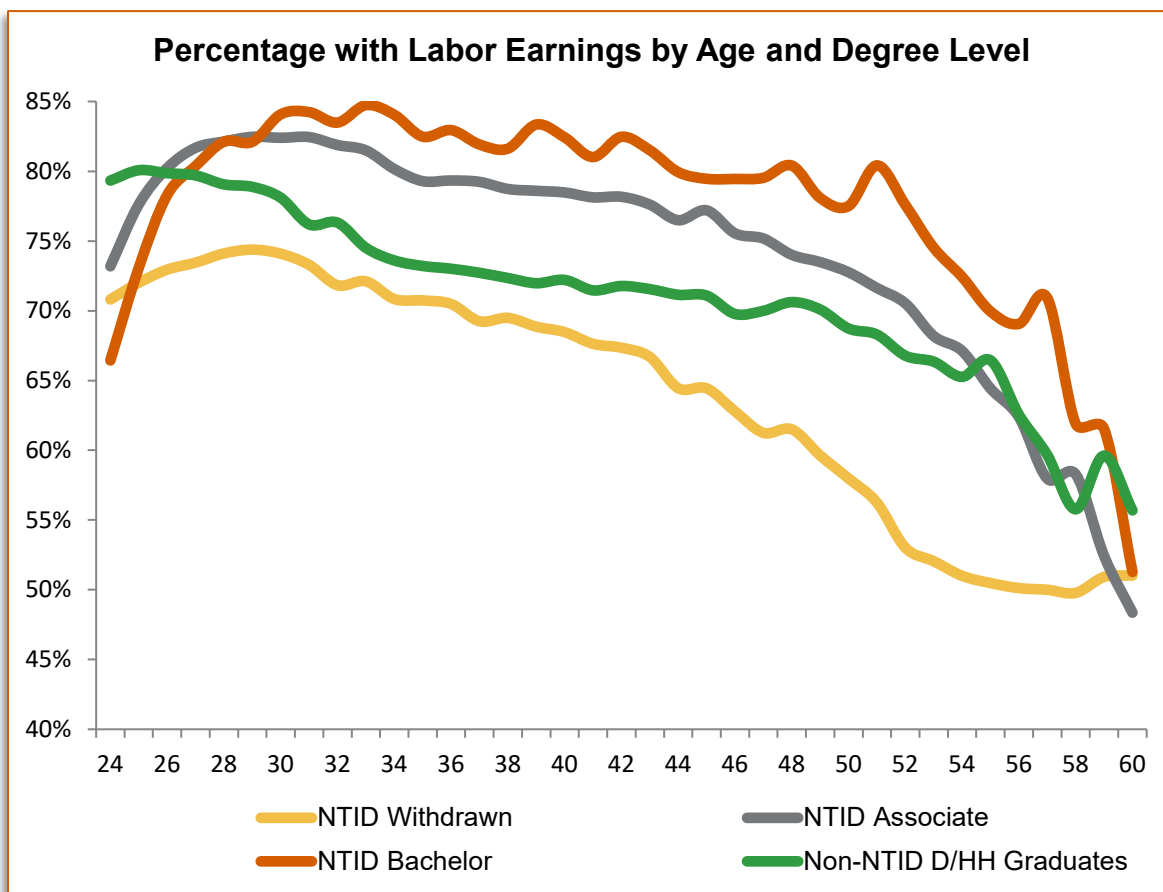| Occupations of Working 2023 Graduates*	%**	Sample Job Titles of 2023 Graduates within Category
Architecture and Engineering	12%	Automation Engineer, Maintenance Engineer, Structural Engineer and Pre-Production Support, Civil Engineer, Electrical Engineer, Packaging Engineer, Mechanical Engineer, Engineer Trainee Quality Engineer, Associate Mechanical Engineer, Mechanical Engineer Consultant
Arts, Design, Entertainment, Sports, and Media	18%	Filmmaker, Graphic Designer, Photographer, Reporter, Tattoo Artist, Product Marketing, Artist Shop Owner, Sketchbook Illustrator, Media Specialist
Building and Grounds Cleaning and Maintenance	1%	Tree Cutter
Business and Financial Operations	4%	Tax Accountant, Principal Cost and Schedule Control Analyst, IPD Assistant
Computer and Mathematics	22%	Mobile Engineer, Penetration Tester, Data Analyst, Server Engineer, Technical Support Analyst, Software Engineer, Systems Admin, Software Developer, Technology Development Program Analyst
Education, Training, and Library	11%	Deaf Services Coordinator, Research Associate, Assistant Director of Outreach, Teacher Assistant, Assistant Director of Psychological Services, Assistant Professor, Post-Doctoral Researcher, Administrative Assistant II
Healthcare Practitioners and Technical	7%	Patient Authorization Representative, Healthcare Coordinator, Pediatric Close Observer, Caseworker, Ambulatory Technologist, Critical Case Nurse Manager
Management	5%	Associate Manager, Enterprise Relationship Manager, Technical Release Manager, Founder and Operator, Deaf Community Engagement Manager
Office and Administrative Support	5%	Administrative Operator, Payroll Clerk, Residential Account Manager, Financial Management Analyst, Administrative Assistant
Production	8%	Paint Shop Technician, Operations Coordinator, Civil Technician, Produce Team Associate
Protective Service	1%	Junior Information System Security Officer
Sales and Related	3%	General Merchandise, Retail Associate, Retail Sales
Transportation and Material Moving	2%	Warehouse Associate, Certified Switcher
Total	**100%**	

* Three of the FY 2023 employed graduates had unknown job titles.
** Percentages may not sum to 100% due to rounding.

Labor Force Status and Earnings of Alumni

The figures below represent the changing employment conditions of deaf and hard-of-hearing alumni from age 24 to 60. Data represented in these figures are from a 2012 study with the Social Security Administration and Cornell University. Findings indicate that individual graduates benefit significantly from the curricula offered through NTID, regardless of graduating.

However, within the NTID alumni population, the magnitude of the benefit does depend on educational attainment. Deaf and hard-of-hearing graduates from RIT show the highest percentage generating income across the majority of working years, as compared with those deaf and hard-of-hearing graduates from other institutions of higher education.

Percentage with Labor Earnings by Age and Degree Level

Legend:
- NTID Withdrawn
- NTID Associate
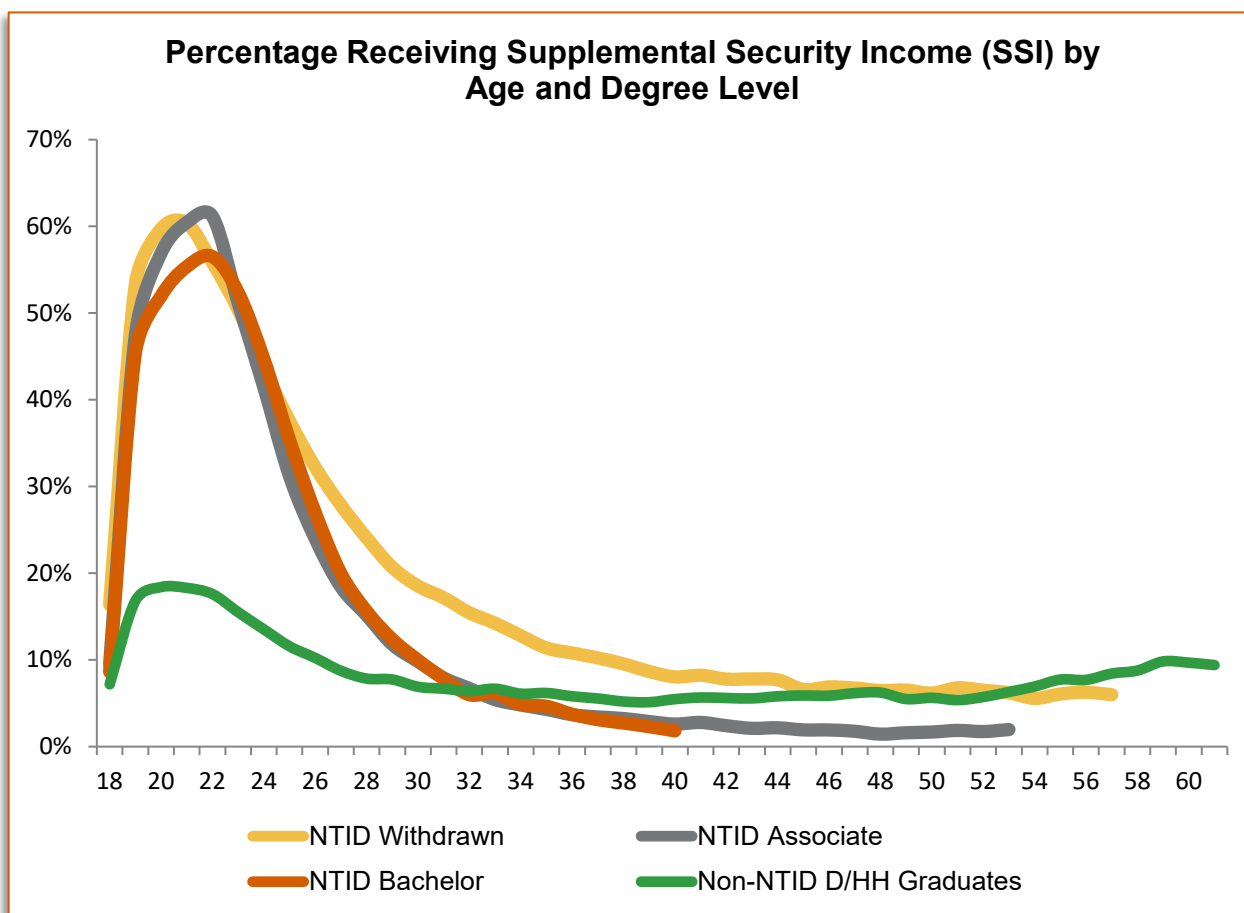- NTID Bachelor
- Non-NTID D/HH Graduates

Note: From a 2012 collaborative research study conducted with the Social Security Administration and Cornell University. To accomplish this, NTID forwarded a data file with approximately 16,000 cases to the Social Security Administration. Four study groups were defined by degree attainment: 1) Deaf and hard-of-hearing graduates who completed a bachelor's degree from RIT (NTID Bachelor); 2) Deaf and hard-of-hearing associate degree earners from NTID (NTID Associate); 3) Deaf and hard-of-hearing individuals who attended RIT/NTID, but withdrew prior to degree completion (NTID Withdrawn); and 4) Deaf and hard-of-hearing graduates from other institutions of higher education (Non-NTID D/HH Graduates).

Labor Force Status and Earnings of Alumni (continued)

Research in collaboration with the Social Security Administration and Cornell University demonstrates the impact that an RIT/NTID education has on producing income for various categories of individuals. At age 50, NTID deaf and hard-of-hearing bachelor's degree graduates earn on average $17,000 more than those with sub-bachelor's degrees, who in turn earn $7,000 more than those who withdrew prior to degree completion from NTID, who earn $13,000 more than deaf and hard-of-hearing graduates from other institutions of higher education. Increased earnings result in greater federal tax contributions.

Labor Earnings by Age and Degree Level

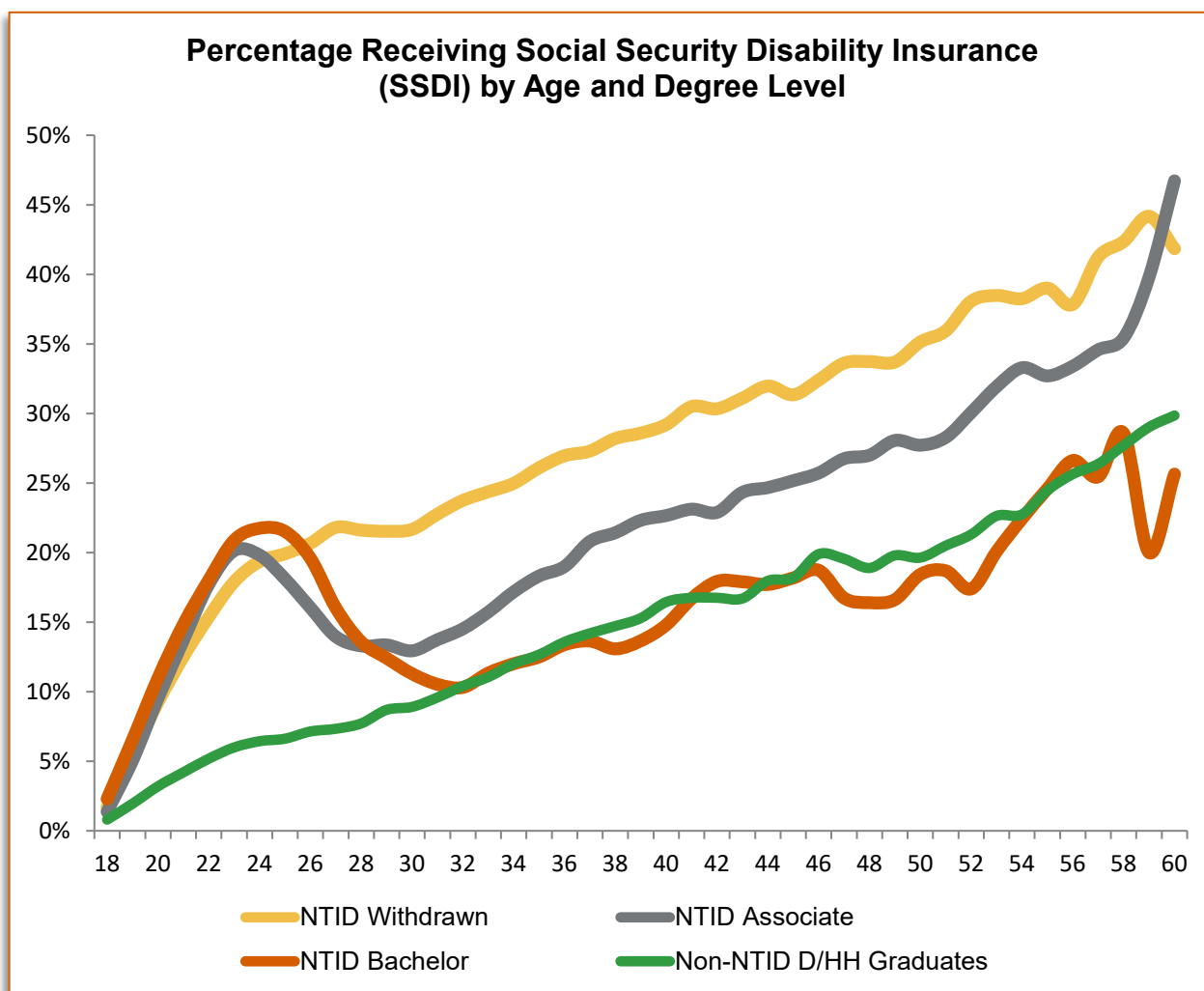Legend: NTID Withdrawn, NTID Associate, NTID Bachelor, Non-NTID D/HH Graduates

Note: From a 2012 collaborative research study conducted with the Social Security Administration and Cornell University. To accomplish this, NTID forwarded a data file with approximately 16,000 cases to the Social Security Administration. Four study groups were defined by degree attainment: 1) Deaf and hard-of-hearing graduates who completed a bachelor's degree from RIT (NTID Bachelor); 2) Deaf and hard-of-hearing associate degree earners from NTID (NTID Associate); 3) Deaf and hard-of-hearing individuals who attended RIT/NTID, but withdrew prior to degree completion (NTID Withdrawn); and 4) Deaf and hard-of-hearing graduates from other institutions of higher education (Non-NTID D/HH Graduates).

Effect of College Graduation on Reduction in SSI and SSDI Payments

Research in collaboration with the Social Security Administration and Cornell University shows the role that the completion of a college degree plays in reducing dependence on continuing federal support. These differences exist for both the Supplemental Security Income (SSI) and the Social Security Disability Insurance (SSDI) programs. At age 40, NTID deaf and hard-of-hearing graduates collect SSI at a rate of less than 2%, as compared to 8% for deaf and hard-of-hearing graduates from other institutions of higher education.

Percentage Receiving Supplemental Security Income (SSI) by Age and Degree Level

Note: From a 2012 collaborative research study conducted with the Social Security Administration and Cornell University. To accomplish this, NTID forwarded a data file with approximately 16,000 cases to the Social Security Administration. Four study groups were defined by degree attainment: 1) Deaf and hard-of-hearing graduates who completed a bachelor's degree from RIT (NTID Bachelor); 2) Deaf and hard-of-hearing associate degree earners from NTID (NTID Associate); 3) Deaf and hard-of-hearing individuals who attended RIT/NTID, but withdrew prior to degree completion (NTID Withdrawn); and 4) Deaf and hard-of-hearing graduates from other institutions of higher education (Non-NTID D/HH Graduates).

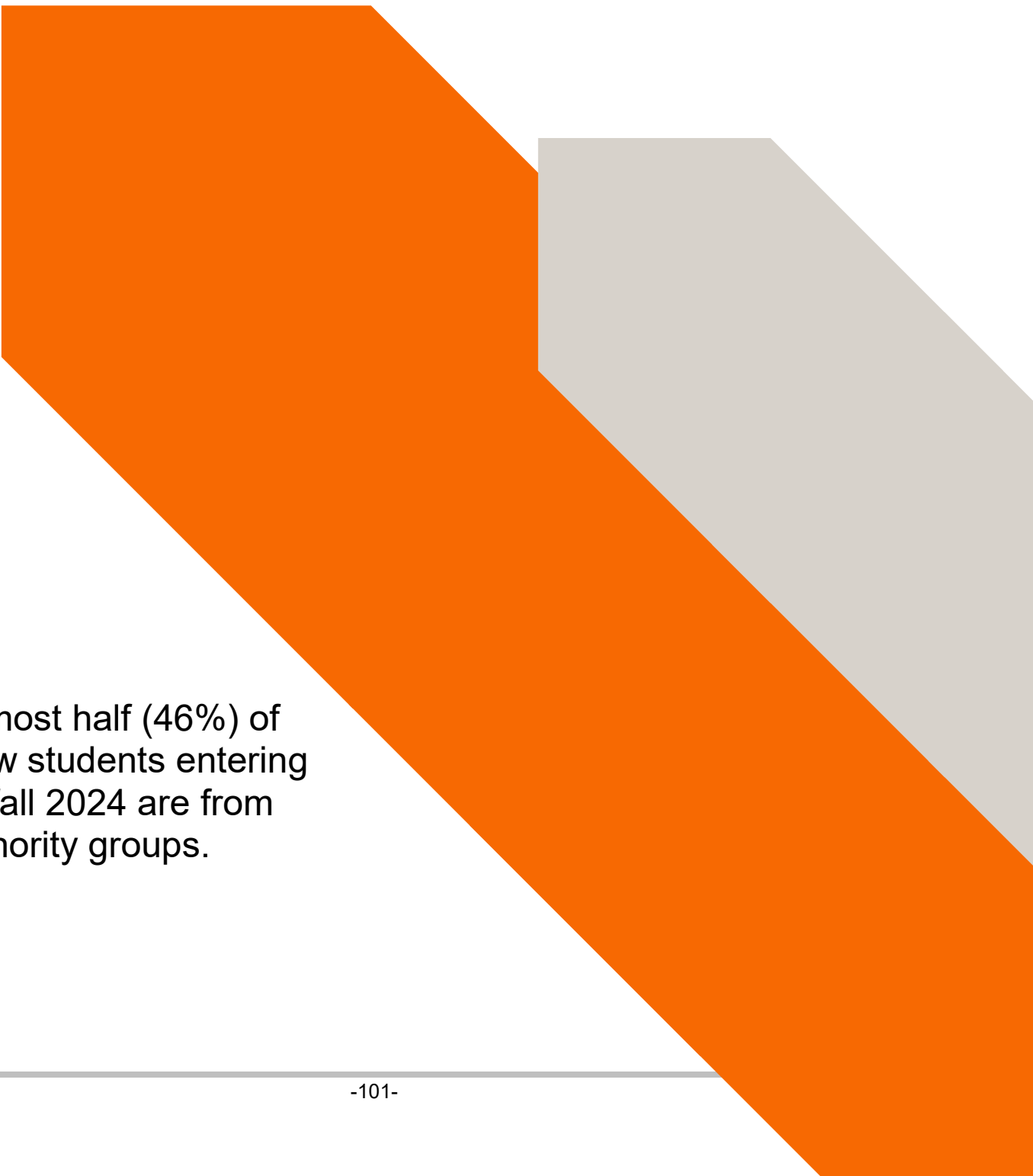# Effect of College Graduation on Reduction in SSI and SSDI Payments (continued)

While a smaller percentage of deaf and hard-of-hearing students collect SSDI in their collegiate years, by age 50, 18% of NTID deaf and hard-of-hearing bachelor's degree graduates collect SSDI, as compared with 20% of deaf and hard-of-hearing graduates from other institutions of higher education. As made evident by the chart below, the impact that a degree has on SSDI payment collection is substantial.

Percentage Receiving Social Security Disability Insurance (SSDI) by Age and Degree Level

Legend: NTID Withdrawn, NTID Associate, NTID Bachelor, Non-NTID D/HH Graduates

Note: From a 2012 collaborative research study conducted with the Social Security Administration and Cornell University. To accomplish this, NTID forwarded a data file with approximately 16,000 cases to the Social Security Administration. Four study groups were defined by degree attainment: 1) Deaf and hard-of-hearing graduates who completed a bachelor's degree from RIT (NTID Bachelor); 2) Deaf and hard-of-hearing associate degree earners from NTID (NTID Associate); 3) Deaf and hard-of-hearing individuals who attended RIT/NTID, but withdrew prior to degree completion (NTID Withdrawn); and 4) Deaf and hard-of-hearing graduates from other institutions of higher education (Non-NTID D/HH Graduates).

Diversity and Inclusion

Almost half (46%) of new students entering in fall 2024 are from minority groups.

Diversity and Inclusion Highlights

Students

For those newly enrolled in fall 2024,

- 45.7% of NTID-supported students are from minority groups.
- 49.6% of deaf and hard-of-hearing students are from minority groups.

For all enrolled in fall 2024,

- 45.3% of NTID-supported students are from minority groups.
- 48.9% of deaf and hard-of-hearing students are from minority groups.

Faculty and Staff

In addition to seeking faculty and staff members who are experts in their field and well versed in teaching techniques for deaf and hard-of-hearing students, NTID has undertaken recruitment and persistence strategies to attract and keep qualified minority and deaf and hard-of-hearing employees and employees with disabilities.

Of 126 employees from ethnic minority populations, 45 are Black or African American, 45 are Hispanic/Latino, and 36 are other minorities.

Of 590* total number of employees, 171 are deaf or hard of hearing.

Of the 257 employees who are deaf or hard of hearing or are members of a minority group, 161 are in executive, faculty, or exempt positions. Note that some individuals count in more than one category.

NTID's commitment to diversity and inclusion has become an integral component of the college's plan of work. Department heads and faculty and staff members are making concerted efforts to recruit, hire, and retain individuals from diverse categories. In the past year, 43% of all hires were either minority individuals or individuals who are deaf or hard of hearing.

RIT/NTID students, including members of NTID's Student Life Team, volunteer to welcome new "Tigers" and help them transition to college life during RIT's convocation activities.

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* Of the 590 employees, 549.88 are covered by operating funds.

NTID Office of Diversity and Inclusion

NTID provides educational programs that prepare graduates to live and work in a changing global community and to enhance their lifelong learning. To succeed in the global workplace, students need to develop a solid understanding of the diversity of the workplace and possess the knowledge, skills, and attributes to thrive in such an environment. The composition of the student body and of the faculty and staff who encounter students needs to reflect that diversity.

NTID recognizes the importance of valuing diversity as it prepares deaf and hard-of-hearing students to enter a global community. Diversity and inclusion stimulate intellectual engagement, critical thinking, and problem-solving skills. Learning and socializing in culturally diverse environments with individuals from all backgrounds can lead to increased innovation and collaboration. Exposure to varying leadership styles from faculty, staff, administrators, and the community—particularly when someone is from a historically underrepresented community—provides lasting benefits.

With continuing shifts in national and international demographics, students need to be prepared to enter a progressively more diverse society and workplace. Students need to develop the willingness, knowledge, and skills to live and work in such an environment. This is critical if they are to gain the understanding necessary to participate actively in society and contribute in meaningful ways to their own success and that of the community in which they live.

In addition to preparing students to enter society and the workplace, NTID's academic environment must respond to the needs of people who are both deaf or hard of hearing and from minority backgrounds. NTID's commitment to recognize, celebrate, and value cultural diversity and individual differences is grounded in the continuing efforts of this country to forge a pluralistic society. It does not arise merely from political pressure or rest solely on public law; instead, it is based on a composite of NTID's mission, a changing student body, and the changing nature of the world. An educational institution has a responsibility not only to reflect society, but also to lead in promoting positive change within that society.

Diversity continues to be a priority in higher education. NTID's *Antiracism and Social Justice Plan* has made significant gains. It focuses on three primary areas: supporting ALANA faculty and staff success through increasing ALANA representation of faculty, staff, and administration to 20%; supporting ALANA student success through increasing persistence and graduation rates; and NTID community education and training to support the ALANA community. NTID's Diversity and Inclusion Executive Team, along with NTID's Administrative Council and individuals who have lead responsibility for specific action steps, have successfully completed some of the actions. To date, there are 32 Action Steps on the plan and 10 were completed, 16 are ongoing, three are RIT-led and three are future priorities. NTID increased the NTID Faculty Fellowship (NFF) program reserved for ALANA faculty members from three to six positions, and MSSE and ASLIE scholarships were awarded in the fall to students from disadvantaged economic backgrounds. An example of an ongoing action step is when NTID increased ALANA representation among administrators and managers from 10% to 14%. NTID also has created culturally responsive first-year academic programming (e.g., STP, SVP, Freshman Seminar, etc.) that provides skills and strategies to improve student persistence. NTID partners with RIT on the RIT-led initiative to fully participate in RIT's *Action Plan for Race and Ethnicity* that includes action steps like working in consultation with RIT Human Resources Department to review hiring process and practices and ensure that progress towards the 2025 ALANA faculty, staff, and administration goals are being made. NTID also works with RIT Division of Diversity and Inclusion to identify specific diversity and anti-bias training that will be required for all faculty, staff, and administrators at NTID to complete as part of their professional development plan. Recently, RIT launched a new tradition in fall 2022 known as *Together RIT: Day of Understanding, Solidarity, and Racial Reconciliation*. On this day, the RIT community engaged in intentional and honest dialogue about race, ethnicity, and racism. It allowed for members of the RIT and NTID community to come together in person and share work, passions, and ideas. NTID continues to be dedicated and committed to ensuring a sense of belonging and inclusion, and success was evident from both RIT and NTID's action plans.

NTID Office of Diversity and Inclusion (continued)

RIT/NTID's Office of Diversity and Inclusion hosted and participated in a variety of events in 2024 including:

- ODI Open House to share information and updates, allow space for faculty and staff to reconnect, introduce new staff, and remind ALANA faculty and staff of resources.

- ODI Holiday Gathering for NTID Faculty Fellowship (NFF) and Randleman Program to allow ALANA faculty and staff to network with fellows in NFF and mentees in the Randleman program.

- Faculty and Staff Focus Groups to discuss NTID ALANA faculty and staff challenges and successes as well as resources and ideas for how to navigate systems.

- Annual Johnnie "JB" Brown Black History Month Celebration to gather the NTID community to celebrate Black History Month with food and a guest speaker.

- Ramadan Presentation by a Muslim alumnus, who educated the community about Ramadan customs.

- Hebrew Association of the Deaf Memorial Fund donated money to NTID to provide educational experiences related to Hebrew/Jewish communities. A live panel of Jewish and Deaf faculty, staff, and students presented on their experiences, and speakers outside NTID presented their experiences separate from the panel.

- Safe Space Opening for Students celebrated the newly dedicated Safe Space where students, faculty, and staff can feel welcome, accepted, free to express themselves, and safe to advocate for themselves by sharing their experiences and perspectives.

ODI also participated in annual events such as Apple Fest, NTID Winterfest Fair, New Faculty Orientation Resource Fair, New Faculty Receptions, NTID New Faculty & Staff Welcome Breakfast, and Rochester City Scholars at Liberty Hill to help bring awareness of our office to the community.

NTID President Gerry Buckley and students prepare for the total solar eclipse, April 2024. Rochester was in the path of totality and became temporary host to thousands of eclipse watchers.

Admissions Activity by Ethnicity*

Fifty-two percent (316) of this year's 714 deaf and hard-of-hearing applicants were students from minority backgrounds. The FY 2024 entering class of deaf and hard-of-hearing students included 141 minority students, who represent 50% of the newly admitted deaf and hard-of-hearing students.

	FY 2021*	%	FY 2022*	%	FY 2023*	%	FY 2024*	%	FY 2025*	%
Deaf and Hard-of-Hearing Applicants										
Total Applicants	647		646		616		660		714	
Non-Minority	264	44%	261	45%	259	48%	271	47%	298	48%
Minority	339	56%	313	55%	285	52%	309	53%	316	52%
Acceptances	473		461		443		473		486	
Non-Minority	218	47%	210	49%	219	52%	218	49%	241	52%
Minority	243	53%	222	51%	203	48%	230	51%	220	48%
Registrations	261		287		251		278		295	
Non-Minority	126	49%	133	48%	124	52%	128	48%	143	50%
Minority	131	51%	141	52%	117	48%	139	52%	141	50%
Other Applicants										
Total Applicants	151		142		131		135		125	
Non-Minority	109	73%	100	74%	93	72%	91	71%	82	69%
Minority	41	27%	35	26%	37	28%	37	29%	37	31%
Acceptances	87		88		79		80		80	
Non-Minority	60	70%	59	72%	62	79%	62	80%	57	73%
Minority	26	30%	23	28%	17	21%	16	20%	21	27%
Registrations	57		58		62		60		55	
Non-Minority	39	68%	39	67%	49	79%	42	70%	41	76%
Minority	18	32%	19	33%	13	21%	18	30%	13	24%

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* Admissions data capture activity stewarded by the NTID Admissions Office and include students who are readmitted. Figures do not include non-degree-seeking students as well as admissions activity in the ASL-English Interpretation program, the Master of Science program in Health Care Interpretation, or the Master of Science program in Secondary Education. Percentages are of individuals for whom NTID has data, less those with international visa status.

Diversity and Inclusion

Ethnicity of New Students*

The FY 2024 entering class included 154 minority students, who represent 46% of the entire incoming class. The FY 2024 entering class of deaf and hard-of-hearing students included 141 minority students, who represent 50% of the newly admitted deaf and hard-of-hearing students.

	FY 2021	Percent Minority	FY 2022	Percent Minority	FY 2023	Percent Minority	FY 2024	Percent Minority	FY 2025	Percent Minority
Deaf and Hard-of-Hearing Students										
American Indian or Alaska Native	0	0.0%	0	0.0%	2	0.8%	4	1.5%	3	1.1%
Asian	33	12.8%	37	13.5%	37	15.3%	37	13.8%	33	11.6%
Black or African American	34	13.2%	30	11.0%	19	7.9%	29	10.9%	29	10.2%
Hispanic/Latino	49	19.1%	57	20.8%	47	19.5%	56	21.0%	58	20.4%
Native Hawaiian or Other Pacific Islander	1	0.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White	126	49.0%	133	48.5%	124	51.5%	128	47.9%	143	50.4%
Two or More Races	14	5.5%	17	6.2%	12	5.0%	13	4.9%	18	6.3%
Non-Resident Alien (International)	4		9		8		8		9	
Unknown Race/Ethnicity	0		8		5		3		3	
Subtotal Minority Deaf and Hard-of-Hearing Students	**131**	**51.0%**	**141**	**51.5%**	**117**	**48.5%**	**139**	**52.1%**	**141**	**49.6%**
Subtotal Deaf and Hard-of-Hearing Students	**261**		**291**		**254**		**278**		**296**	
Other Enrollments										
American Indian or Alaska Native	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Asian	2	3.6%	1	1.7%	0	0.0%	4	6.7%	2	3.7%
Black or African American	4	7.0%	5	8.6%	4	6.5%	2	3.3%	3	5.6%
Hispanic/Latino	6	10.5%	7	12.1%	4	6.5%	8	13.3%	7	13.0%
Native Hawaiian or Other Pacific Islander	0	0.0%	0	0.0%	0	0.0%	1	1.7%	0	0.0%
White	39	68.4%	39	67.2%	49	79.0%	42	70.0%	41	75.9%
Two or More Races	6	10.5%	6	10.4%	5	8.0%	3	5.0%	1	1.8%
Non-Resident Alien (International)	0		0		0		0		0	
Unknown Race/Ethnicity	0		0		0		0		1	
Subtotal Minority Other Enrollments	**18**	**31.6%**	**19**	**32.8%**	**13**	**21.0%**	**18**	**30.0%**	**13**	**24.1%**
Subtotal Other Enrollments	**57**		**58**		**62**		**60**		**55**	
Total Minority Enrollments	**149**		**160**		**130**		**157**		**154**	
Total Enrollments	**318**		**349**		**316**		**338**		**351**	
Overall Percent Minority		**47.5%**		**47.9%**		**43.3%**		**48.0%**		**45.7%**

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* New students are those who have not previously attended RIT or are attending as a graduate student for the first time.

Ethnicity of Enrolled Students

Minority enrollment at NTID has steadily increased from 8% in FY 1988 to 45.3% in FY 2025, more than five times what it was more than 30 years ago.

Until FY 2000, the number of international students was limited to 10% by a federally mandated cap. As a result of the reauthorization of the Education of the Deaf Act in 1998, the cap on international students was increased to 15%. However, a significant decrease in support from Vocational Rehabilitation in Canada and limited resources of students from other countries have had a negative impact on international enrollment.

	FY 2021	Percent Minority	FY 2022	Percent Minority	FY 2023	Percent Minority	FY 2024	Percent Minority	FY 2025	Percent Minority
Deaf and Hard-of-Hearing Students										
American Indian or Alaska Native	2	0.2%	1	0.1%	2	0.2%	5	0.6%	7	0.7%
Asian	117	13.5%	138	15.0%	135	15.0%	143	16.0%	130	13.8%
Black or African American	89	10.3%	97	10.6%	90	10.0%	88	9.9%	93	9.9%
Hispanic/Latino	146	16.8%	161	17.5%	171	19.1%	165	18.5%	174	18.6%
Native Hawaiian or Other Pacific Islander	2	0.2%	1	0.1%	1	0.1%	1	0.1%	0	0.0%
White	474	54.6%	477	51.9%	459	51.1%	445	49.9%	479	51.1%
Two or More Races	38	4.4%	44	4.8%	40	4.5%	45	5.0%	55	5.9%
Non-Resident Alien (International)	30		34		36		29		31	
Unknown Race/Ethnicity	10		17		12		9		13	
Subtotal Minority Deaf and Hard-of-Hearing Students	**394**	**45.4%**	**442**	**48.1%**	**439**	**48.9%**	**447**	**50.1%**	**459**	**48.9%**
Subtotal Deaf and Hard-of-Hearing Students	**908**		**970**		**946**		**930**		**982**	
Other Enrollments										
American Indian or Alaska Native	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Asian	4	2.1%	5	2.6%	3	1.6%	8	4.1%	9	4.7%
Black or African American	9	4.7%	12	6.2%	11	5.9%	11	5.6%	9	4.7%
Hispanic/Latino	17	8.8%	18	9.3%	14	7.5%	20	10.1%	24	12.5%
Native Hawaiian or Other Pacific Islander	0	0.0%	0	0.0%	0	0.0%	1	0.5%	1	0.5%
White	149	77.6%	144	74.2%	144	77.0%	142	72.1%	139	72.4%
Two or More Races	13	6.8%	15	7.7%	15	8.0%	15	7.6%	10	5.2%
Non-Resident Alien (International)	0		0		0		1		1	
Unknown Race/Ethnicity	1		2		2		1		1	
Subtotal Minority Other Enrollments	**43**	**22.4%**	**50**	**25.8%**	**43**	**23.0%**	**55**	**27.9%**	**53**	**27.6%**
Subtotal Other Enrollments	**193**		**196**		**189**		**199**		**194**	
Total Minority Enrollments	**437**		**492**		**482**		**502**		**512**	
Total Enrollments	**1,101**		**1,166**		**1,135**		**1,129**		**1,176**	
Overall Percent Minority		**41.2%**		**44.2%**		**44.4%**		**46.1%**		**45.3%**

First-Year Student Persistence and Graduation Rates by Diversity Categories

NTID enrolls students with diverse backgrounds. This diversity has increased significantly during the past decade. However, there are noticeable differences among the various groups in terms of persistence and graduation rates. In FY 2008, the Department of Education requested that NTID's performance indicators in the areas of persistence and graduation be consistent with IPEDS methodology. The information below follows this methodology.

First-Year Persistence Rates for First-Time Full-Time Students*
Three-Year Moving Averages

Fall 2021-2023 Cohort	Black or African American	Asian	Hispanic/Latino	Non-Resident Alien (International)	White
Cohort Count	64	80	118	9	293
Persisted to Second Year	40	66	81	9	237
First to Second Year Persistence Rate	63%	83%	69%	100%	81%

Six-Year Graduation Rates for First-Time Full-Time Students*
Three-Year Moving Averages

Fall 2016-2018 Cohort	Black or African American	Asian	Hispanic/Latino	Non-Resident Alien (International)	White
Cohort Count	71	63	123	22	330
Graduated Within Six Years	28	45	55	16	203
Six-Year Graduation Rate	39%	71%	45%	73%	62%

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* Figures reported do not include students in the ASL-English Interpretation program. Specific data for this program is included within the section on Performance Indicators.

Graduates by College and Program Areas: Minority Status

This table shows minority student graduates in the academic program areas.

	FY 2024 Number of Graduates		
	Minority	Non-Minority	Total**
NTID			
Career-Focused and Associate+Bachelor's Degrees	51	24	81
ASL-English Interpretation	7	24	32
Master of Science in Secondary Education	7	26	33
Master in Health Care Interpretation	2	2	4
Other Colleges of RIT*			
College of Engineering Technology	3	7	11
Saunders College of Business	11	9	21
B. Thomas Golisano College of Computing and Information Sciences	7	10	18
Golisano Institute for Sustainability	0	0	0
Kate Gleason College of Engineering	4	3	7
College of Health Sciences and Technology	3	8	11
College of Art and Design	7	12	19
College of Liberal Arts	8	14	24
College of Science	8	3	11
School of Individualized Study	8	4	13
Total	**126**	**146**	**285**

* Includes bachelor's and master's degrees granted by the other colleges of RIT, as well as sub-baccalaureate degrees.
** Totals include individuals with unknown race/ethnicity and international visa status. Neither are considered minority or non-minority.

Diversity and Inclusion

Diversity Report: Faculty and Staff

NTID continues to emphasize and encourage the hiring, promotion, and persistence of women, minorities, and individuals who are deaf and hard of hearing. Appropriate representation in each category remains a priority for NTID, given the ever-increasing ethnic diversity in the student body. In the chart below, individuals may appear in more than one category.

FY 2024

	Total Employees	Female	Black or African American	Hispanic/Latino	Other Racial/ Ethnic Categories*	Deaf and Hard-of-Hearing
Faculty	148	82	9	11	13	69
Percent		55%	6%	7%	9%	47%
Exempt Staff	146	92	17	4	8	55
Percent		63%	12%	3%	5%	38%
Non-Exempt Staff						
Real-Time Captionist	59	45	1	1	2	0
Percent		76%	2%	2%	3%	0%
Interpreter	141	123	9	22	8	1
Percent		87%	6%	16%	6%	1%
Technical/ Clerical	96	67	9	7	5	46
Percent		70%	9%	7%	5%	48%
Executive/ Administrative Manager	65	38	7	0	2	27
Percent		58%	11%	0%	3%	42%
Total*	**590**	**409**	**45**	**45**	**36**	**171**
Percent		**69%**	**8%**	**8%**	**6%**	**30%**

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*   Other Racial/Ethnic Categories includes American Indian & Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, and two or more races.

**   Of the 65 executive/administrative managers, 22 are included on the faculty line, 43 are included on the exempt staff line, and one is included on the technical/clerical line. Therefore, the numbers in the Executive/Administrative Manager row are not included in the column totals, since they already are included in the faculty or exempt staff lines.

***   Of the 590 employees, 549.88 are covered by operating funds.

Diversity Report: Faculty and Staff Applicants

RIT/NTID tracks minority status and gender of applicants via voluntary self-identification. A summary of those data are provided below. Individuals may be counted in more than one category.

FY 2024

	Number of NTID Positions Posted	Total Applicants	Number of Applicants by Category					
			Female	Black or African American	Hispanic/ Latino	Other Racial /Ethnic Categories*	White Male	Unknown
Faculty	22	150	83	1	20	25	47	2
Exempt Staff	23	468	172	13	36	234	78	40
Non-Exempt Staff**	67	1,373	860	123	172	107	305	53
Total	**112**	**1,991**	**1,115**	**137**	**228**	**366**	**430**	**95**

Diversity Report: Faculty and Staff Hiring Results

During FY 2024, individuals from an ethnic minority
or who were deaf or hard of hearing totaled 43% of
all new hires and women totaled 68% of all new hires.
Individuals may appear in more than one category.

FY 2024

	Total New Employees	Female	Black or African American	Hispanic/Latino	Other Racial /Ethnic Categories*	Deaf and Hard-of-Hearing
Faculty	9	6	0	1	1	2
		67%	0%	11%	11%	22%
Exempt Staff	8	3	0	1	3	2
		38%	0%	13%	18%	25%
Non-Exempt Staff**	43	32	3	4	2	10
		74%	7%	9%	5%	23%
Total	**60**	**41**	**3**	**6**	**6**	**14**
		68%	5%	10%	10%	23%

* Other Racial/Ethnic Categories includes American Indian & Alaskan Native, Asian, and two or more races.
** Includes technical and clerical positions, real-time captionists, and interpreters.

Diversity Report: Faculty and Staff Termination Results

During FY 2024, 30% of terminations were individuals from ethnic minorities and 61% were women. In the chart below, individuals may appear in more than one category.

FY 2024

	Total Terminated Employees	Female	Black or African American	Hispanic/Latino	Other Racial /Ethnic Categories*	Deaf and Hard-of-Hearing
Faculty	10	4	1	0	0	2
		40%	10%	0%	0%	20%
Exempt Staff	9	6	0	3	1	2
		67%	0%	33%	11%	22%
Non-Exempt Staff**	46	29	4	8	2	9
		63%	9%	18%	4%	20%
Total	**65**	**39**	**5**	**11**	**3**	**13**
		61%	8%	17%	5%	20%
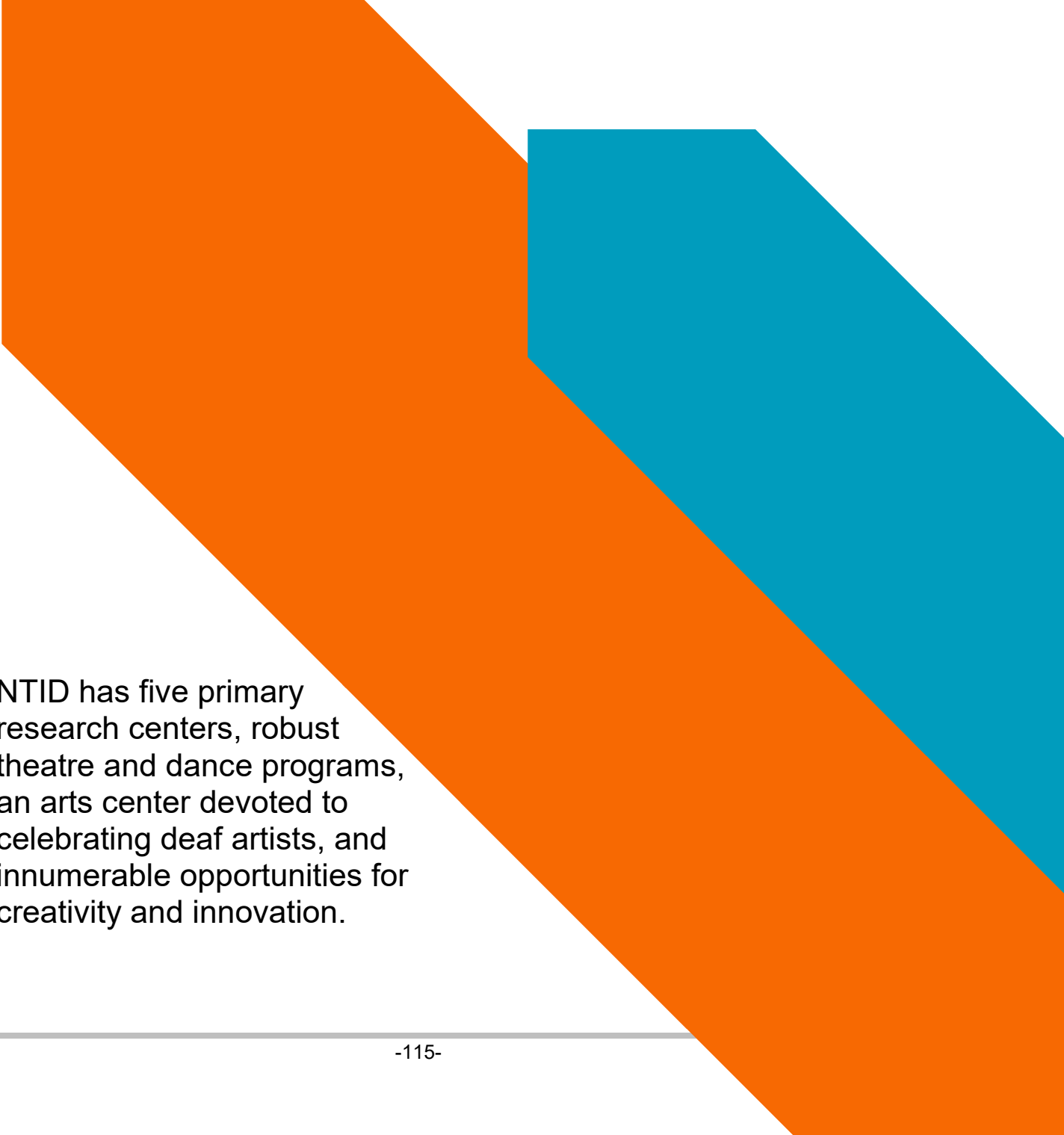
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*   Other Racial/Ethnic Categories includes American Indian & Alaskan Native, Asian, and two or more races.

**   Includes technical and clerical positions, real-time captionists, and interpreters.

Research, Innovation, and Creativity

NTID has five primary research centers, robust theatre and dance programs, an arts center devoted to celebrating deaf artists, and innumerable opportunities for creativity and innovation.

Research

NTID Research Overview

NTID determines topics for research projects on the basis of priorities derived from both internal and external sources, including the U.S. Department of Education, the NTID National Advisory Group, the National Science Foundation, the National Institutes of Health, and other federal, state, and foundation funding sources. The NTID Research Enhancement Committee (NREC) provided NTID 15 recommendations in January 2022 on ways the college can advance faculty scholarship, meet the rising expectations of RIT for faculty to receive sponsored program funding, and produce scholarship that shows the world our faculty are experts in their disciplines. NTID faculty conduct research on special institutional projects established in response to immediate needs identified by NTID's administration. The research interests of NTID faculty, often in combination with faculty of other RIT colleges and/or institutions outside of RIT, contribute to the college's research activities. In addition to strategic research and special projects that typically focus on people who are deaf or hard of hearing and the Deaf experience, NTID supports the research of scholars teaching in any NTID academic area, including mathematics, science, linguistics, sign language interpreting, business, and other disciplines. NTID students are consistently involved in faculty research, providing valuable learning experiences and skills development to prepare them for a variety of careers. Research activity at NTID creates new knowledge that is passed along to NTID students in the classroom as well.

Office of the Associate Dean of Research (OADR)

In FY 2024, Dr. Matthew Dye served as associate dean of research from January 2024 to June 2024. At the time of publication, the associate dean of research position was vacant, and a search to fill the position was put on hold. The OADR staff, as well as NTID's Associate Vice President for Academic Affairs, Gary Behm '78, '81, continue to provide support for NTID research as described below.

The mission of the OADR is to increase the number of funded projects in the college and to support and sustain NTID's research enterprise. The office is responsible for facilitating NTID efforts in evidence-based research relevant to deaf and hard-of-hearing individuals, including teaching and learning, communication and language, employment success, access technology, deaf health, and other topics. In addition to providing leadership for strategic research in the college, the office provides direct administrative support, both pre- and post-award, for all research and grant-related activity at the college and plays a key role in expanding NTID's funding portfolio.

The office continued to focus on the 15 NREC recommendations in FY 2024 while providing fiscal and administrative support for research projects and professional development for principal investigators (PIs), as well as publicizing the research accomplishments of faculty and staff. In this annual report, three broad areas are described to illustrate what the OADR provides.

a. **Support for researchers and research initiatives**

The OADR's Scholarship Portfolio Development Initiative (SPDI) provides intramural grants to meritorious applicants proposing innovative research, outreach initiatives, or other types of scholarly projects. In FY 2024, SPDI offered intramural funds of up to $12,000 for one- or two-year projects. Applicants may request an additional $3,000 to support the involvement of collaborators from other colleges and institutions, another priority of the program. In FY 2024, two new SPDI proposals were funded for a total of $26,950. Five SPDI projects that were funded in prior fiscal years remain active at this time.

Research (continued)

<u>Early language experience and reading behaviors of deaf adults: An eye-tracking study</u>
5/1/2024-4/30/2026 $14,950
PI: Frances Cooley
Mentor: Rain Bosworth

Please refer to the Reading And Deafness (RAD) Lab under the NTID Sensory, Perceptual and Cognitive Ecology (SPaCE) Center for a description of this project.

<u>American Deaf Clubs Oral History Collection Project</u>
5/1/2024-4/30/2026 $12,000
PI: Corinna Hill
Mentor: Deirdre Schlehofer

The primary goal of this project is to collect oral history interviews, document Deaf stories, and compile archival research on Deaf Clubs that will be shareable online as a teaching and community resource, as well as produce scholarly works including publications and presentations.

Start-Up Packages (SUPs) are financial support agreements established for new tenure-track faculty, the goal of which is to facilitate their research and other scholarly activities in the early years of their employment at NTID. SUPs are funded by the OADR. The amount and intended usage of SUP funds is negotiated between the Associate Vice President of Academic Affairs and the individual faculty member, and becomes a key aspect of their employment offer, whether they are new or existing NTID faculty who are new to a tenure-track position. Four new SUP accounts were established this year, bringing the total of currently active SUP accounts to 10. Examples of common SUP expenditures include faculty summer salary, research equipment, funds to hire student research assistants, travel support to attend and present at conferences, human subject fees, and consultant fees.

The OADR also provides fiscal support for consultation with experts in three topic areas: statistics, program evaluation, and writing/editing. Faculty may request any of these expert services in support of research or scholarship activities. The arrangement with professional statisticians from RIT's College of Science (COS) was launched in FY 2020. Each of these services enhances the viability of grant proposals, ongoing projects, and/or manuscripts in preparation such as research reports and journal articles. These expert consultants also enhance the associated knowledge and skills of NTID faculty in the oft-challenging aspects of planning, conducting, and disseminating research.

It is quite common for faculty to approach the OADR seeking funding for various purposes that are not included in grant or academic department budgets or expired SUPs. Such research-related purchases, which are almost always approved, include travel, equipment, human subject fees, open-access journal fees, captioning/translation costs, travel funds, and more.

The OADR closely monitors communications from relevant research funding bodies such as the National Science Foundation (NSF), the National Institutes of Health (NIH), and a number of foundations and other organizations. The OADR regularly analyzes these communications to determine those that are most relevant to our faculty and shares that information with the faculty as a whole or, sometimes, specific faculty members whose interests and activities are particularly suited to opportunities from funders. As detailed below, the OADR often directly supports faculty participation in professional development activities offered by funding agencies, where faculty learn about an agency's funding priorities, grant procurement mechanisms and policies, etc.

b. Professional development

In FY 2024, OADR had to pause *PI Prime Time,* a professional development program designed to enhance faculty success in applying for extramural funding, improving project management skills with funded projects, and disseminating research and scholarly work. However, the program relaunched in Fall 2024 (FY 2025), with confirmed fall topics including:

- Understanding grant budget statements and reports,
- Preparing an SPDI (Scholarship Portfolio Development Initiative) proposal, an internal seed funding program leading to external funding, and
- Working with human subjects and handling human subject payments.

Tenure-track faculty often use their SUP funds (see above) for professional development activities, primarily attending and presenting at conferences in their areas of academic concentration. The OADR also provides funding for professional development outside the SUP process, including for faculty who do not have SUPs or for whom their SUP accounts have expired after the five-year SUP spending limit. In the past, OADR has funded sign language interpreter services for some conferences and co-funds faculty groups attending high-priority conferences (e.g., one on quantitative research methods held in 2019).

The OADR also emphasizes the importance of professional development for its staff. In FY 2024, OADR staff attended virtual conferences hosted by the Society of Research Administrators International and the National Council of University Research Administrators covering pre-award and post-award topics.

c. Publicizing the accomplishments of NTID personnel working on funded projects

OADR regularly contributes content to the monthly newsletter from NTID's Office of the President. This typically includes news of recently obtained grants by NTID faculty, awards, or other accomplishments worthy of attention. Additionally, OADR works with NTID's Communications, Marketing, and Multimedia Services department to develop press releases for dissemination to appropriate news outlets.

Research (continued)

RESEARCH CENTERS

This section summarizes the activities and accomplishments of each NTID Research Center during FY 2024. When there is collaboration among several research centers, the activity is described in connection with the research center leading the effort.

NTID Sensory, Perceptual and Cognitive Ecology (SPaCE) Center

Matthew W. G. Dye, Ph.D., director

The research mission of the NTID SPaCE Center is to study the sensory, perceptual, and cognitive capabilities of deaf and hard-of-hearing individuals, and to explore how those individuals create deaf-friendly environments within which they can most effectively function. In FY 2024, SPaCE Center faculty and staff published four peer-reviewed journal articles and presented at virtual and in-person academic conferences.

SPaCE currently encompasses six research laboratories:

1. deaf x laboratory

Matthew W. G. Dye, Ph.D., principal investigator

The mission of the deaf x laboratory is to investigate how the deaf experience ("x") shapes cognition, including attention and executive brain functions. During FY 2024, the deaf x laboratory continued work on three major research projects:

- Neurocognitive Plasticity in Young Deaf Adults: Effects of Cochlear Implantation and Sign Language Experience
  National Institutes for Health: NIDCD R01DC016346   7/1/2017–9/30/2024
  PI: Matthew Dye $2,604,026

  The overall aim of this project is to examine the effects of auditory development, cognitive function, and language outcomes in a large group of young deaf adults. The results of this study will provide much-needed and timely answers regarding the possible benefits of early cochlear implantation and early intervention with sign language that parents and policy-makers seek as they determine how best to intervene with the next generation of deaf infants who are cochlear implant recipients or candidates. In FY 2024, the team completed data collection activities and started publishing initial results.

- Collaborative Research: Multimethod Investigation of Articulatory and Perceptual Constraints on Natural Language Evolution
  National Science Foundation: BCS-1749376   7/1/2018–10/31/2023
  PI: Matthew Dye $343,975

  The research team will take advantage of the fully visible articulators of sign languages to develop novel pose estimation algorithms so that they automatically can extract information contained in 2D videos to create accurate 3D models of articulator movement during sign language production. These models will be used to empirically assess the extent to which linguistic changes are driven by perceptual constraints imposed by the human visual system and/or articulatory constraints imposed by the musculoskeletal system. This project is a collaboration between RIT/NTID, Pennsylvania State University, Boston University, Bryn Mawr College, and Barnard College. A final report on outcomes will be presented at TISLR 15 in Addis Ababa in January 2025.

Research (continued)

- IRES Track II: Translanguaging Science: Enhancing Literacy Research Through Enhanced Assessment of Proficiency and Processing
  National Science Foundation   8/1/2020–7/31/2024
  PI: Matthew Dye; Co-PI: Joseph Hill $401,828

  This award supported eight-to-10 graduate students annually for two years at an Advanced Studies Institute in Stockholm University (Sweden) titled "Inclusive Assessment of Multi-Model Multilinguals." For the summers of 2022 and 2023, the institute was two weeks in length and had a particular focus on print literacy in deaf and hard-of-hearing children who commonly participate in translanguaging practices. The materials developed for both institutes will be maintained on the IAM3 website.

2. Perception, Language & Attention in Youth (PLAY) Laboratory

Rain G. Bosworth, Ph.D., principal investigator

The mission of the PLAY Laboratory is to investigate how different types of sensory experience shape the ways in which we perceive the world, with a particular emphasis on the study of infants and young children. During FY 2024, the PLAY Laboratory continued work on two research projects:

- Deaf Preschoolers' Exploratory Behaviors and Parent Guidance during Shared Museum Experiences
  National Institutes for Health: NIDCD R15DC021349   8/1/2023–7/31/2026
  PI: Rain Bosworth $428,054

  Compelled by curiosity and a desire to learn, children naturally explore. Hands-on object exploration is important for building knowledge about how the world works, especially during shared discovery with caregivers who often provide guidance. Among children who are born deaf, the majority are born to hearing parents who struggle to provide early accessible language. It is likely that language deprivation early in life impacts how children explore and learn about their surroundings. It is also likely that for deaf children who have deaf parents, sign language exposure from birth changes exploratory behaviors in ways that are adaptive for deaf children and different from hearing children. During a museum visit, we 1) describe deaf children's exploratory behaviors, 2) investigate how individual differences in age and quantity of sign language exposure relates to quality of exploratory behaviors, and 3) uncover the ways parents support their deaf children.

- Do Tactile Exploratory Behaviors Predict Language Development in Deaf Signing Children?
  James S. McDonnell Foundation: JMSF 2021-2864   9/1/2021–8/31/2025
  PI: Rain Bosworth $249,695

  Deaf signing children may explore their surroundings in the classroom in adaptive ways that afford learning benefits for them. In this proposal, we describe and classify tactile exploratory and communicative behaviors of deaf preschoolers during free play activities in an ASL-primary classroom. We assess this using a multiple-camera system installed in the classroom and with lightweight, miniaturized inertial measurement (IMU) bilateral wristbands that each contain an accelerator, gyroscope, and magnetometer.

3. Perception & Acquisition of Words (PAW) Laboratory

Allison Fitch*, Ph.D., principal investigator

Established in FY 2021, the mission of the PAW Laboratory is to study the inter-relationships between the developing visual cognitive system and language acquisition. A particular interest is how joint attention contributes to language acquisition and the relationship between early language experiences and low-level visual attention mechanisms. These questions are addressed in infant and toddler populations, particularly deaf children acquiring ASL.

- Early Word Learning in Deaf Children Acquiring ASL: The Role of Input and Attention
  National Institutes for Health: NIDCD 2R01DC015272   6/1/2022–5/31/2025
  PI: Allison Fitch [subaward] $101,091

  Deaf children learning American Sign Language (ASL) perceive both linguistic input and the visual environment in the same modality, and therefore must learn to divide their attention between them. Most deaf children also are born to hearing parents who lack expertise in ASL and have little experience structuring interactions in the visual mode. Thus, deaf children must learn to strategically allocate their visual attention to map language onto the surrounding world, but parents may not have optimal strategies to scaffold their deaf child's learning. These factors place deaf children at risk for delay in development of both language and visual attention, which can have cascading consequences for children's ability to manage complex visual and linguistic environments they may encounter. The current proposal uses experimental and observational approaches to understand how deaf children develop attentional skills and how parents support children's developing attention.

- Collaborative Research: EAGER: The ASL-FEEL Corpus
  National Science Foundation   9/1/2024–8/31/2026
  PI: Cecilia Alm; Co-PI: Allison Fitch $170,130

  In collaboration with researchers at Gallaudet University, we will create an American Sign Language (ASL) corpus, inclusive of ASL dialogues, for the purpose of annotating emotion, role-shifting, and prosody. This resource will also systematize an annotation method for reproducible annotations led by team members with experience in ASL and data annotation. The annotation quality will be refined, through iterative evaluation with inter-annotator measures that are common in corpus creation. At the end of the project, we will release the annotated ASL corpus for linguistic research. Anticipated outcomes include: (1) an ASL corpus that captures ASL characteristics that are currently understudied, (2) a tested method of annotation for representing them in ASL, (3) best practice guidelines for continued annotation use, and (4) dissemination of the research in manuscripts written in English and in ASL video-recorded research products. Our diverse team of investigators will train deaf graduate and undergraduate research assistants in ASL corpus creation as well as annotation and resource evaluation.

* Dr. Fitch is an assistant professor of psychology in the College of Liberal Arts at RIT.

4. Research on Interpretation and Translation Education (RITE) Laboratory

Kierstin Muroski, Ph.D., principal investigator

Established in FY 2022, the mission of the RITE lab is to perform socially conscious research on the education of signed language interpreters including a broad focus on students, faculty, curricula, assessment, history, and institutions. The goal of the lab is to create inquiry-based scholarship to inform improvements to the discipline of interpreter education and improve the quality of services to the Deaf community.

5. Reading And Deafness (RAD) Lab

Frances G. Cooley, Ph.D., principal investigator

The mission of the RAD lab is to investigate how the unique experiences of deafness and sign language use impact reading behaviors in deaf children and adults who are ASL-English bilinguals. During FY 2024, the RAD lab established a new research project:

- Early language experience and reading behaviors of deaf adults: An eye-tracking study
  NTID Scholarship Portfolio Development Initiative (SPDI)   5/31/2024–4/30/2026
  PI: Frances Cooley $14,950

  This project evaluates the eye-movement behaviors of deaf adults who learned to read before and after learning American Sign Language. This study will contribute to the growing body of literature that uses eye-tracking to evaluate the role of deafness and sign language knowledge on reading behaviors in deaf adult readers. This and similar projects have demonstrated the unique strategies developed by individuals who learn to read without access to speech sounds. This project is a collaboration between RIT/NTID and Dr. Karen Emmorey at San Diego State University.

6. Langdon Laboratory for Developmental Cognitive Neuroscience

Clifton Langdon, Ph.D., principal investigator

The Langdon Laboratory for Developmental Cognitive Neuroscience aims to advance understanding of how different experiences with language and sensory differences impacts the cognitive processes underlying other domains of cognition. Currently, our most active line of research is focused on investigating how deafness and later first language impacts the learning of early numerical cognition. The aim is to generate knowledge that will have a twofold impact: (1) refines and improves our models of cognition (perhaps even revolutionizes them!) (2) can be used by applied education scientists for them to be informed in their attempts to design better interventions for children with later first-language exposure.

- Spatial Attention and the Nature of Nonverbal Number Representation
  RIT Grant Writers' Boot Camp   5/1/2024–8/31/2025
  PI: Clifton Langdon $5,000

  Parallel individuation gives rise to the ability to rapidly identify and enumerate up to four objects (subitization). Whether subitizing is a pre-attention process or an attentional process has attracted considerable debate. Here I propose to test the hypothesis that subitizing is an attentional process by testing whether deaf individuals with greater allocation of attention to periphery show a shift from the parallel individuation system to the approximate number system (ANS). This shift would be indicated by a change in EEG waveform (ERP) from the early evoked N1 to the later evoked P2p. By comparing enumeration under high attentional load in between deaf and hearing individuals, we apply a novel lens to a debate that holds high impact for our understanding of the intersection between visual-spatial attention and numerical cognition.

Center on Access Technology (CAT)

Gary Behm '78, '81, director; Spencer Montan '16, associate director

The Center on Access Technology (CAT) was established in 2006 to address the challenges of utilizing, developing, and/or adapting new technologies for use by people who are deaf or hard of hearing in order to improve access to personal communication within educational environments, social settings, and the workplace. CAT investigates, evaluates, and reports on the most effective use of access technologies and trains individuals in order to accelerate the implementation of best practices within postsecondary deaf education. The center's main strands of research include cyber-infrastructure and

provision of remote services, classroom access technologies, mobile and personal communication technologies, training and evaluation services, and audio technologies that are of particular interest to hard-of-hearing people.

The NTID CAT Lab strives to involve students in the research and development enterprise. Faculty and students at all levels (associate, bachelor's, master's, and doctorate) collaborate on multidisciplinary projects leading to real solutions.

- <u>MITRE FCC Telecommunications Relay Services (TRS): Year Six</u>
  Federal Communications Commission / MITRE Corporation $755,392
  PI: Michael Stinson

  RIT is collaborating with the MITRE research corporation on research, testing, and procedures in order to share assessment approaches to obtain test results on Video Relay Service (VRS) and Internet Protocol Captioned Telephone Service (IP-CTS), further develop approaches and research, and share plans and results. This project involves, but is not limited to: (a) usability research on consumer perspectives regarding the use of IP-CTS, VRS, and other assistive technologies and on determining the accuracy and latency threshold of captions in IP-CTS technology; (b) assessment of the interoperability of VRS devices; (c) assessment of the quality of VRS and IP-CTS services; and (d) research and development of various prototypes closely related to the ongoing ACE efforts.

- <u>PopSign</u>
  Google $50,000
  PI: Spencer Montan '16

  The Center on Access Technology (CAT) is partnering with Google and Georgia Institute of Technology to develop a mobile application, PopSign, aimed at teaching hearing parents American Sign Language (ASL) and helping them communicate with their deaf and hard-of-hearing children. The app is supported by sign language recognition technology and teaches more than 500 ASL signs based on the vocabulary from the MacArthur-Bates Communicative Development Inventories. The developments will make the mobile application a more interactive learning experience that parents can utilize anywhere and anytime.

NTID Research Center on Culture and Language (CCL)

Peter C. Hauser, Ph.D., director; Joseph Hill, Ph.D., associate director; Jason Listman '07, '09, Ed.D., associate director; Jessica Contreras '12, '16, M.S., research assistant professor; Farhan Rana, M.B.A., research program coordinator

CCL's mission is to promote sign language access and education through research, development, and mentorship focusing on communities of sign language users' cultural and linguistic characteristics and processes. The CCL projects described below were fully or partially funded by NTID as a part of one of the institute's four Strategic Research Areas (Sign Language Communication) and the current administration's commitment to providing state-of-the-art, top-notch faculty American Sign Language (ASL) skill evaluations, ASL teaching, and interpreter education. The CCL project ideas and research questions are formulated based on a combination of: a) what deaf and hard-of-hearing community members, students, and professionals have expressed as priorities; b) what sponsored programs list as priorities in their request for proposals; and, c) what fits in RIT's and NTID's missions. For projects that were fully or partially funded by sponsored programs, the funding source was mentioned in the project descriptions provided below. Otherwise specified, the remaining projects are funded by NTID's operating budget allocations to CCL. In FY 24, these funds covered the cost of hiring 12 student research assistants and provided them research opportunities because academic and scholarship mentoring is CCL's priority. These student research assistants were given research roles and experiences to prepare them for higher education and research careers. Funds for research participants were provided for student-led or student-faculty partnered projects.

Research (continued)

Under NTID's Sign Language Communication Strategic Research Area, in FY 24 CCL had 18 projects that covered the Center's three broad research areas: 1) Deaf Culture; 2) ASL Assessment; and 3) ASL Teaching and Learning. In FY 24, CCL produced 22 scholarly products: seven peer review publications; and 15 conference presentations with 13 including student co-authors and nine with students as the first author.

1. Deaf Culture

1.a. <u>Language Evaluation of Signing Avatars</u>
NTID Internal Funding
PI: Joseph Hill

Deaf community members are still debating about what looks "right" in ASL, and ASL teachers have different ideas about the "right way" to sign. Whatever language ideologies they uphold, they express them through their evaluative statement or judgments, which are called language attitudes in sociolinguistics. In this CCL study, people's attitudes toward ASL signed statements are reproduced by animated signing avatars with identifiable racial and gender markers. The aim is to determine whether the differences in participants' perception and evaluation of the signing production could be observed due to the presence of racial and gender markers of the avatars. In FY 24, the results of 12 participants who evaluated the signing production of five different signing avatars from the same human signing model were analyzed. The avatars differed by gender and race based on the phenotypical features: one black female, one black male, one white female, and one white male. The other human-like avatar was intentionally designed to be gender and racially ambiguous with blue skin to serve as a control. The results illustrated that despite the computer-animated appearance of the avatars, the participants showed their preferences for the certain avatars based on their comments about the appearance, signing production, facial expressions, and personality. This indicates that the use of signing avatars is a useful tool in addressing the challenge of visual-kinetic modality in masking the actual signer's identity and in eliciting participants' true feelings. The results of this study are currently being written up for publication in a peer-reviewed journal.

1.b. <u>Black Deaf Families</u>
NTID Internal Funding
PI: Joseph Hill

Much of what is known about Deaf Culture, particularly in the United States of America, has been based on the lives and experiences of white deaf signers. In fact, in the past, schools for the deaf were segregated and schools for Black Deaf children did not use the white variant of ASL. To learn more about the Black Deaf experience, CCL has been conducting a study of Black Deaf families. Stories of older Black Deaf families from archival video interviews of the members of Black Deaf families are being analyzed. This study addresses the gap in the literature on families of African-American Deaf and hard-of-hearing Americans and explores the community and familial contexts of Black ASL. In FY 24, the coding of interview transcripts of individuals who identified themselves as part of Black Deaf families and the transcripts of Black Deaf participants who participated in a workshop discussion about Black Deaf families was completed.

1.c. <u>Parents Empowering Parents</u>
National Research Center for Parents with Disabilities $29,005
PIs: Peter Hauser and Jessica Contreras '12, '16

People who identify as deaf ASL users comprise a marginalized and stigmatized group who may have experienced challenges in both informal and formal learning related to parenting. Deaf parents are disproportionately likely to lack social support, experience interpersonal violence (Anderson & Leigh, 2011; Anderson & Pezzarossi, 2014; Ballan et al., 2017; Fellinger et al, 2012; Pollard et al., 2014), experience marital discord, be involved in child custody disputes, are involved with child protective services, and struggle with inaccessible legal and court systems (see Abedi et al., 2018 for review). Deaf parents miss incidental learning opportunities, and thus are disproportionately likely to have significant

literacy, health literacy and knowledge gaps (Hauser et al., 2010; McKee & Hauser, 2012; McKee et al., 2015; Pollard & Barnett, 2009). Similar to other disadvantaged populations who struggle with inadequate health literacy, children of parents with inadequate health literacy have poorer health and developmental outcomes (Griese et al., 2020; Scotten, 2015). This is believed to be largely due to low navigational ability or literacy (Griese et al., 2020; Scotten, 2015). Additionally, deaf parents' children more often experience poor educational progress compared to children of hearing parents (Singleton & Tittle, 2000). At the same time, systemic factors in the health, education, and legal sectors render service providers ill-prepared to support deaf parents. While there have been a few studies on these issues as they manifest within the healthcare and child protection systems (i.e., Albert & Powell, 2020; McKee, Barnett, Block, & Pearson, 2011), the data pertaining to most of these issues is largely anecdotal, based on observations from various legal, medical, social, and educational providers. Deaf parents often struggle in navigating these different parenting-based resources, strategies, and requirements, placing themselves at increased risk for adverse parenting outcomes. In FY 24, this study was developed to update and identify parenting issues that deaf parents frequently face and ultimately incorporate the findings to provide resources for this population. In FY 25, deaf parents from diverse backgrounds will be interviewed and the themes and resources identified will be used in an intervention during the second phase of the project.

1.d. Impact of Audism, Linguicism, and Ableism on Deaf Adults' Mental Health
NTID Internal Funding
PIs: Peter Hauser, Piotr Tomaszewski, Piotr Krzysztofiak, and Joanna Kowalska

In collaboration with the University of Warsaw and the SWPS University of Social Sciences and Humanities, CCL studied deaf people's mental health and the effects of ableism, audism, and linguicism. Deaf people experience different types of oppression: ableism (able-bodied oppression), audism (hearing-ability oppression), and linguicism (sign language-use oppression). This study investigated if deaf adults internalize these oppressive experiences and if it predicts their mental health. In FY 24, data was analyzed from Deaf participants (N = 134) from Poland who completed a 54-item Deaf Oppression Scale, developed for this study with Ableism, Audism, and Linguicism Subtests, along with the Beck Depression Inventory-II and the State and Trait Anxiety Inventory. Results demonstrated that the Deaf Oppression Scale (α = 0.91; 95% CI = 0.89, 0.93) and its Ableism (α = 0.78; 95% CI: 0.72, 0.83), Audism (α = 0.79; 95% CI: 0.73, 0.83), and Linguicism (α = 0.86; 95% CI: 0.82, 0.89). Subscales have good reliability and the model fit indices for a confirmatory factor analysis indicated a good fit: $\chi^2(1374)$ = 3372, p <0.001; comparative fit index = 0.96; Tucker-Lewis Index = 0.972; and, root mean square error of approximation = 0.079 (95% CI: 0.075, 0.083). Fifteen (15%) percent of the sample had mild to severe depression, 36% had moderate to severe state anxiety, and 64% had moderate to severe trait anxiety. Internalized ableism ($t(133)$ = 2.368, p = .019) was found to predict greater characteristics and symptoms of depression; internalized ableism ($t(133)$ = 2.867, p = .005) and linguicism ($t(133)$ = 2.075, p = .006) were found to predict greater state anxiety or hyperarousal; and internalized audism ($t(133)$ = 2.408, p = .017) was found to have an effect on trait anxiety or the persistent tendency to attend to and experience fear, worry, and anxiety across many situations. This is the first empirical evidence dissociating three types of oppression that deaf people experience and their separate and different effects on their psychological well-being. The results of this study have been submitted for publication in a peer-reviewed journal.

2. American Sign Language Assessment

2.a. Reliability of the Fingerspelling and Number Comprehension Test (FaNCT)
NTID Internal Funding
PIs: Jessica Contreras '12, '16, Peter Hauser, and Jason Listman '07, '09

American Sign Language (ASL) is a signed language that utilizes fingerspelling for articulating specific words and number sequences. This project aims to understand how time limitations and presentation techniques of the Fingerspelling and Number Comprehension Test (FaNCT) affect second language ASL learners' ability to comprehend fingerspelling and numbers through a test-retest approach. This will be achieved by examining how repeated exposure and slower presentation speeds impact participants'

performance. These findings will contribute to the discussion on appropriate presentation of ASL stimuli in assessment instruments and provide insights into the cognitive processes involved in processing fingerspelling. The results will have implications for students with disabilities who might require untimed tests or repeated viewing of stimuli on formal ASL comprehension tests. If the results demonstrate that no time limits and repeating videos does not affect comprehension, then current tests should remove such restrictions. In FY 24, this project was developed, and Institute Review Board of Human Subject approval was received. Data will be collected in FY 25.

2.b. <u>Use of the FaNCT as an American Sign Language Course Placement Test</u>
NTID Internal Funding
PIs: Jessica Contreras '12, '16, Peter Hauser, Kim Kurz '93, '95, Jason Listman '07, '09, and Diane Clark

In collaboration with Lamar University, the Fingerspelling and Number Comprehension Test (FaNCT) is being administered to college students who are taking ASL courses to determine if the test can be used in the future as a course placement tool. In FY 24, the protocol and procedures for administering the FaNCT remotely to Lamar students was established and data collection started. In FY 25, data will continue to be collected and compared with data collected from NTID's Bachelor of Science in Interpreting students. The results of this study will determine the FaNCT score levels required for different course placements.

2.c. <u>Classroom Sign Language Assessment (CSLA)</u>
NTID Internal Funding
PIs: Peter Hauser, Jessica Contreras '12, '16, and Kim Kurz '93, '95

The Classroom Sign Language Assessment was developed by NTID more than two decades ago to supplement the Sign Language Proficiency Interview (SLPI). At that time, faculty were concerned that the SLPI does not measure what happens in the classroom and wanted a classroom-based ASL assessment tool. The CSLA was reviewed and revised by CCL and the NTID Sign Language Assessment and Resource Center to reflect current knowledge related to sign language linguistics and assessment. In 2024, the CSLA was pilot tested with a sample of NTID faculty to refine the rating tool and was shared with ASL faculty for feedback. In FY 25, SLPI raters will be trained on how to score faculty videos of their use of ASL in the classroom. The ratings obtained will be used to study the psychometric properties of the assessment procedures.

3. **American Sign Language Teaching and Learning**

3.a. <u>Trajectory of Interpreter Education Students' ASL Learning as a Second Language</u>
NTID Internal Funding
PIs: Jason Listman '07, '09, One O'Neill, Peter Hauser, and Jessica Contreras '12, '16

One of the major challenges in the instruction of ASL to adult L2 learners is the lack of empirically based scholarly studies guiding instruction. This gap in research is partly due to the absence of assessment instruments, as mentioned earlier. The Center on Culture and Language (CCL) is currently testing all students entering NTID's Department of ASL and Interpreter Education (ASLIE) Bachelor of Science in ASL-English Interpretation (BSI) program. This new multi-cohort longitudinal study will help us understand the language development trajectory of L2 ASL learners and establish a baseline for future research. These results will also help the BSI program set benchmarks, as ASLIE's accreditation from the Conference of Interpreter Trainers (CIT) requires BSI students to graduate with Advanced ASL skills as their minimum competency. In FY 24, we collected more than 100 participants' ASL skills and are tracking certain cohorts to observe their progress. For FY 25, we aim to continue our data collection and begin preliminary analysis to improve the program and prepare a manuscript for publication.

Research (continued)

3.b. <u>BIPOC Interpreting Students' Perspective on Interpreting Training Program</u>
NTID Internal Funding
PIs: Taylor Harris '22, Manjot Kaur '23, Jeni Rodrigues, Joseph Hill, and Jason Listman '07, '09

There is a significant lack of BIPOC interpreters in the field of interpreting, and there are limited white interpreters who possess both cultural and linguistic competence to effectively serve BIPOC Deaf consumers (Wessling, 2020). This study aims to provide a better understanding of the perspectives held by current and former interpreting students of color regarding interpreter education programs. Data for this research has been collected. The team currently is in the process of preparing a manuscript for submission to the *International Journal of Interpreter Education (IJIE)* and will be submitted in FY 25.

3.c. <u>Training Programs and Job Opportunities for Deaf Interpreters</u>
NTID Internal Funding
PIs: Kim Kurz '93, '95, Keith Cagle, Alisha Bronk, and Jason Listman '07, '09

Deaf interpreters (DIs) are Deaf individuals who serve as interpreters for members of their own community. They play diverse roles, leveraging their unique Deaf Extra Linguistic Knowledge (DELK), which some hearing interpreters may lack (Adam, et al., 2014; Boudreault, 2005; Forestal, 2011; Kanapell, 1993). Approximately five years ago, there was limited data available regarding the job market for DIs. However, the COVID-19 pandemic has highlighted the pressing need for accessible communication for Deaf and hard-of-hearing communities worldwide. This study seeks to address questions such as: 'In what types of work do Deaf Interpreters engage? In what settings? How many hours? What kind of training is necessary to become a professional DI?' through a comprehensive survey. In FY 24, we collected more than 300 participants and presented at the National Association for the Deaf Biennial Conference in Chicago. For FY 25, the team will present updated findings at Conference of Interpreter Trainers in Berkeley, CA, and hopes to draft a report and/or manuscript.

3.d. <u>Students Perception of the Learning Assistant Model in Interpreting Program Courses</u>
NTID Internal Funding
PIs: Tadhg Hicken '22 and Jason Listman '07, '09

Many Interpreter Education Programs (IEPs) have recognized that even a four-year baccalaureate program may not provide sufficient time to adequately prepare future interpreters. This study advocates for the implementation of the Learning Assistant (LA) model as a potential strategy to enhance the quality of interpreters entering the field. Using mixed methods, the study aims to further explore which LA responsibilities students in the American Sign Language and Interpreter Education Program at NTID perceive as most beneficial in supporting their learning. In FY 24, the manuscript is being prepared by a leading author who is currently in a doctoral program. We aim to finalize this manuscript for submission to the *International Journal of Interpreter Education (IJIE)* in FY 25.

3.e. <u>Landscape of ASL Education</u>
NTID Internal Funding
PIs: Jason Listman '07, '09, John Pirone, Kim Pudans-Smith, and Tracy Ivy

The scholarship of ASL education is in its early stages, with limited insight into the perspectives of ASL professionals in the field. A team of four Deaf ASL researchers conducted a qualitative study, engaging in focus group discussions with 13 ASL professionals who have dedicated their careers to ASL education. The study aims to deepen the understanding of ASL education as a discipline, including its strengths, challenges, and future directions. The qualitative study was published in *Foreign Annals* in 2023. Currently, the study is in its second phase, during which a survey was developed based on the qualitative findings, and data was collected in FY 24. A manuscript is being prepared and is expected to be submitted by the end of FY 25.

Research, Innovation, and Creativity

Research (continued)

3.f. <u>Types of Feedback in ASL Classroom</u>
NTID Internal Funding
PIs: John Pirone and Jason Listman '07, '09

The Center on Culture and Language (CCL) is collaborating with a faculty member from the University of Vermont, Burlington, to better understand how ASL instructors evaluate their students' language performance in the classroom. In FY 24, a survey was developed and widely distributed. The survey consists of 15 questions, each highlighting an intentional error in ASL. Participants are asked to select one of five common types of corrective feedback that best aligns with their daily practice to address the error. The survey has gathered responses from more than 100 ASL instructors across the United States. In FY 25, preliminary findings will be presented at the American Council on the Teaching of Foreign Languages (ACTFL) Convention in Philadelphia, PA, in November, and a manuscript will be prepared for publication.

3.g. <u>ASL Second Language Learners Use of Character and Observer Viewpoints</u>

NTID Internal Funding
PIs: Peter Hauser, Jessica Contreras '12, '16, Geo Kartheiser '09, and Kim Kurz '93, '95

Studies of co-speech gestures in spoken languages (use of gesture while talking) has shown that two different viewpoints are often portrayed in gestures. Speakers' gestures in retelling often reflect a character's perspective or an observer's perspective. Interestingly, in sign language research, these gesture characteristics are often referred to as classifiers and construct action. Using NTID's database of second language learners' reproduction of the "Canary Row" cartoons (see 2.b above), student research assistants were trained on how to review and code different viewpoints. The coding continued in FY 24 as well as additional coding for reliability analyses. In FY 25, the analyses will be completed, and results will be submitted for publication.

3.h. <u>ASL Second Language Learners' Spatial Perspective Taking Skills</u>
NTID Internal Funding
PIs: Peter Hauser, Jessica Contreras '12, '16, Geo Kartheiser '09, and Kim Kurz '93, '95

Studies of the cognitive skills of Deaf signers have shown that spatial cognition is important for ASL signers' spatial perspective taking skills. These unique skills of sign language users have been studied among native signers of ASL and British Sign Language but not among those who learn a sign language later in life. It is not clear if the spatial cognition skills that are required for this linguistic task can be developed later in life as an adult learns a second language in a different modality, not spoken but spatial. In collaboration with the Laboratory for Language and Cognitive Science, San Diego State University, CCL has collected cross-sectional and longitudinal data of college students' cognitive skills before, during, and after different levels of ASL undergraduate courses. In FY 24, data analysis was completed and a manuscript to be submitted for publication has been prepared and will be submitted in FY 25.

Center for Education Research Partnerships (CERP)

Jessica Williams, Ph.D., co-director; Thomastine Sarchet-Maher '03, '09, Ed.D., co-director

The Center for Education Research Partnerships (CERP) is charged with establishing and joining research partnerships concerning development and learning among deaf and hard-of-hearing students across the lifespan and in various educational settings (rit.edu/ntid/cerp/). Primary activities include promotion of related research collaboration among individuals, educational institutions, and organizations, both nationally and internationally. These and other activities focus on bridging research and practice to optimize educational opportunities and success for students who are deaf or hard of hearing. This notion of serving as a collaborator and an incubator for new ideas lies at the heart of the research center.

Research (continued)

CERP was established to contribute to the education of deaf and hard-of-hearing students of all ages through the sharing of research findings and expertise with others. In FY 2024, CERP faculty members delivered a variety of invited/keynote lectures for schools and organizations in the United States and abroad, in addition to conference presentations. CERP members collaborated with colleagues at schools and universities in the U.S. and abroad through ongoing research and joint publications.

Beyond this sharing of knowledge related to deaf education, CERP activities bring greater visibility to RIT/NTID, thus creating additional opportunities for both collaborations and extramural funding. CERP partnered with Oxford University Press and Flagler College to launch *Caregiver and Practitioner Briefs* to be published alongside the *Journal of Deaf Studies* and *Deaf Education*'s quarterly volumes. The briefs provide readers with quick-to-read and easy-to-understand information about educational strategies, policy decisions, and new topics in deaf education based on current research. In addition, CERP partnered with the Summer Transition Program (STP) department to host its sixth cohort during summer 2024. The program supported 55 first-year NTID students. The Summer Transition Program is slated to continue in future years at NTID, expanding to other regions in the United States. At the same time, a shorter version of the program for high school students was implemented in Alabama, Florida, Utah, and New York City with the NTID Regional STEM Center during summer 2024. Beyond providing essential academic support for students, the program is expected to attract new students in the future and provide a wealth of data for forthcoming publications. The STP program has been a core focus of CERP's research agenda over the last four years.

Dissemination

In FY 2024, CERP personnel published a peer-reviewed journal article. CERP personnel also have served the field of deaf education by giving two invited workshops and two peer-reviewed presentations and publishing a book chapter.

RIT/NTID DEAF HEALTH CARE AND BIOMEDICAL SCIENCE HUB (DEAF HUB)

Tiffany Panko '08, '09, M.D., M.B.A., executive director

RIT/NTID is participating in a partnership with the University of Rochester (UR) and the Rochester Regional Health (RRH) organization to develop a National Hub of Excellence that will support the academic development, professional training, and career advancement of deaf and hard-of-hearing individuals pursuing careers in biomedical and behavioral science fields. These institutions are combining their experience and expertise in research training, health care, and the education of deaf and hard-of-hearing students. The Rochester Hub concept is explained in the following publication:

Buckley, G., Smith, S., DeCaro, J., Barnett, S., & Dewhurst S. (Jan. 19, 2017). Building community for deaf scientists. *Science*, 355(6322), 255.

From these efforts, the RIT/NTID Deaf Health Care and Biomedical Science Hub (Deaf Hub) was established in 2022. The mission of the Deaf Hub is to promote representation of deaf and hard-of-hearing individuals in health care and biomedical science careers. This is done by supporting pathways to healthcare careers, creating and supporting networks for deaf scientists, and conducting research related to the Deaf community, their health, and healthcare access. The Deaf Hub's vision is for deaf and hard-of-hearing individuals across the country to have levels of access to education, employment, and career advancement in a variety of health care occupations that match their skills and aspirations. For more information about the Deaf Hub, visit: https://www.rit.edu/ntid/deafhub.

The Deaf Hub works towards the long-term goal of increasing the number of deaf and hard-of-hearing people entering health care and biomedical science careers. This work is supported by research and training programs as discussed below.

Research (continued)

Research and Scholarship

Three research labs and research affiliates are under the Deaf Hub.

1. Deaf Health Laboratory

Tiffany Panko '08, '09, M.D., M.B.A., director

The Deaf Health Laboratory (DHL) was established by Jessica La Sala '98, '02, in 2016. The DHL's mission is to promote health justice through research and initiatives in health priority areas including but not limited to healthcare systemic barriers, health literacy, family planning, and preventive health. During FY 2024, lab personnel worked on:

- Reproductive Health Experiences of Deaf Women: A Mixed-Methods Study
  NTID Scholarship Portfolio Development Initiative (SPDI)   9/1/2020–12/31/2023
                                                                  $15,000

  Society of Family Planning   1/1/2021–12/31/2023
  PI: Tiffany Panko '08, '09 $72,549
  Co-PI: Corrine Occhino, Mentor: Jess La Sala '98, '02

  The goal of this project is to gather national data on the reproductive behaviors and healthcare system use of deaf and hard-of-hearing women as well as qualitative data through socio-linguistics interviews. During FY 2024, a national survey completed circulation, and interviews have been underway. Writing results for the quantitative and qualitative portions has begun.

- Bringing *H is for Hormones* to Schools for the Deaf
  American Association for the Advancement of Science   6/3/2023–6/2/2025
  PI: Tiffany Panko '08, '09 $50,000

  The goal of this project is to empower deaf and hard-of-hearing (henceforth, deaf) middle school girls to know more about STEM through a visual medium promoting women's health. Funding will send copies of a book created by a previous IF/THEN funded project 'H is for Hormones: An A to Z Guide to Your Changing Body' to schools for the deaf across the U.S., add a teacher's guide to be made available as a PDF for all on the project PI's website, and promote the book to the deaf and general population.

  Affiliated faculty: Deaf Health Laboratory: Mariam Paracha

- Deaf Perspectives from Medication Literacy Assessment and COVID-19 Experiences
  NTID Funds and Deaf Hub   12/12/2021–5/1/2025
  PI: Mariam Paracha $94,875

  Inadequate medication literacy among the Deaf population contributes to challenges accessing and understanding health information. Of ongoing concern are language and communication barriers to understanding prescription labels – a situation which can contribute to unintentional medication misuse or non-use with potentially adverse consequences for those who already experience sub-optimal health outcomes. Within this context, the aim of this exploratory study was to gain an understanding of medication literacy among Deaf adults as reflected in medication information-seeking behaviors, practices, and preferences. These insights will inform the development of a web-based assessment tool, designed to measure levels of medication literacy relating to understanding and using information provided on prescription labels.

Research (continued)

- Transparent Communication: Effective, Safe, Accessible Clear Masks
  NTID Funds and Deaf Hub   12/14/2022–12/30/2023
  PI: Mariam Paracha $388,923
  Co-PI: Jordan Wright

  Over the years, clear masks have been proposed and researched, especially in medical settings. Introduction of clear personal protective equipment into everyday use has been halted due to cost, ineffective design, and perceptions of lacking demand. At RIT/NTID, specifically with our deaf and hard-of-hearing (DHH) community and sign language interpreters, we have seen the available clear mask options fall short of safety standards, marginalize visual capacity due to fogging, lack of comfort, and even unattractive appearance. We assessed eight clear masks, analyzed their characteristics, and conducted user experience studies with four of these masks involving DHH individuals and sign language interpreters. Our next step is to develop several prototypes that address these gaps.

2. XR Accessibility Solutions Laboratory (XR-ASL)

Wendy A. Dannels '98, '99, '00, '05, director

XR-ASL develops real-time, immersive, and interactive technologies such as mixed, augmented, and virtual reality with a focus on accessible and inclusive experiences. During FY 2024, the XR-ASL laboratory completed the first year of funding on the following grant:

- Evaluating the Use of Mixed Reality Smart Glasses for Real-Time Captioning Display and Interpreting Services
  National Institute on Disability, Independent Living, and Rehabilitation Research: 90IFRE0083
  PI: Wendy A. Dannels '98, '99, '00, '05   9/1/2023–8/31/2026
  Co-PIs: Tiffany Panko '08, '09 and Elissa Weeden $600,000

  This project is funded by the National Institute on Disability, Independent Living, and Rehabilitation Research's (NIDILRR) center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). This field-initiated project is entering the second year of piloting the use of smart glasses to meet the expectations of the Rehabilitation Act for participation. Deaf individuals continue to struggle with inconsistent accessibility to qualified sign language interpreters and captioners that are critical to equitable educational, employment, and community opportunities around biomedical sciences and healthcare. The major goal of this project will be achieved through tailored smart glasses that allow for deaf individuals' viewing of remote sign language interpreters and real-time captioners. One of the expected outcomes includes enhanced communication access between health/biomedical deaf signing and non-signing individuals, regardless of line of sight, sustained attention limitation, executing activities limitation, or participation restriction.

3. Research and Education on Accessible Communication in Health Care Laboratory (REACH)

Jeni Rodrigues Ph.D., director

The Research and Education on Accessible Communication in Health Care (REACH) Laboratory, established in 2024, seeks to address inequities Deaf individuals face within healthcare systems by examining barriers limiting access to effective communication and exposing gaps in care. The lab is dedicated to developing best-practice, evidence-based programming and providing ASL-English interpreters working in healthcare settings with opportunities to cultivate expertise while becoming social-justice-minded, reflective practitioners. During FY 2024, the REACH Laboratory worked on one primary project:

Research (continued)

- <u>Inclusive Health Care: Investigating Deaf Patient Language Access in US Hospitals</u>
  NTID Research Start-Up Package & Deaf Hub   10/3/2023–present
  PI: Jeni Rodrigues $11,850
  Student Investigators: Ace Bairan, Beck Dean, Taylor Parides, and Manjot Sidhu

  This mixed methods study seeks to identify practices hospitals engage in to provide deaf patients with access to effective communication and uncover gaps in care. Findings will provide insight into the current state of language access services and recommend practices hospitals can adopt to establish equitable standards of care. In FY 24, a database was developed listing ASL-English interpreters who are certified as healthcare interpreters or received in-depth training. Three surveys were developed to collect information from deaf patients, healthcare interpreters, and employees responsible for language access services at hospitals nationwide. In FY 25, the surveys will be distributed widely, followed by qualitative interviews.

Mentorship and Training

During FY 2024, the Deaf Hub continued its Summer Healthcare Academic Research Program (SHARP). SHARP had a total of four students (co-op, full-time) work with various labs in the Deaf Hub as well as two apprentice interpreters. The interpreters were recent graduates of RIT/NTID's interpreting programs and were hired to have a mentored experience gaining knowledge and skills for academic research interpreting. SHARP research assistants presented at the RIT Undergraduate Research Symposium, and one will be presenting at the Annual Biomedical Research Conference for Minoritized Scientists.

Three NIH-funded educational development programs form the nucleus of the Hub pipeline to support the academic development of deaf and hard-of-hearing students who aspire to careers in biomedical and behavioral science fields: RIT U-RISE (for RIT undergraduate students), Rochester Bridges to the Doctorate (for RIT graduate students), and the Rochester Postdoctoral Partnership (for postdoctoral fellows). The first award is a partnership across six colleges of RIT, and the latter two awards are in full partnership with the University of Rochester Medical Center.

- <u>U-RISE Scientists-in-Training Program for Deaf and Hard-of-Hearing Undergraduates</u>
  National Institutes of Health   4/6/2022–3/31/2027
  PI: Tiffany Panko '08, '09 (RIT/NTID) $1,194,050
  Co-PI: Paul Craig (RIT/College of Science)

  The RIT Undergraduate Research Training Initiative for Student Enhancement Scientists-In-Training Program for Deaf and Hard of Hearing Undergraduates (RIT U-RISE) is a cross-campus collaboration among NTID and RIT's College of Science, College of Liberal Arts, College of Health Sciences and Technology, Kate Gleason College of Engineering, and B. Thomas Golisano College of Computing and Information Sciences. The goal of the program is to diversify the national scientific workforce by increasing the number of deaf and hard-of-hearing biomedical, biobehavioral, and clinical research scientists.

  RIT U-RISE is providing research preparation, research experience, supplemental research training, and career preparation to support six deaf and hard-of-hearing undergraduate RIT students (U-RISE trainees) who aspire to become successful Ph.D. scientists. U-RISE trainees engage in intensive research training, working closely with selected RIT faculty and external mentors during three academic years and two summer terms. The grant pays stipends to students as well as partial tuition remission, and provides funds for lab and other research supplies. U-RISE trainees also receive ongoing advising/counseling, feedback on their writing, special research-environment accommodations as determined by periodic research-environment communication access assessments, and enhanced academic mentoring from faculty researchers. The project team uses doctoral readiness meetings and individualized research development plan assessments to track the success of trainees in achieving targeted core research competencies.

Research (continued)

The RIT U-RISE Program also provides ongoing curricular and co-curricular programming to promote undergraduate research experiences for students throughout RIT. With the Deaf Hub and Bridges, RIT U-RISE sponsors Deaf Hub Exploring Perspectives presentations to expose trainees and the greater RIT community to leading-edge scientific research by deaf and hard-of-hearing and hearing scientists and to the personal career journeys of successful deaf and hard-of-hearing scientists. RIT U-RISE also developed two new career and research-oriented courses, two new summer research training workshops, and two new online certification courses that introduce interested students and faculty to career options in biomedical science, scientific writing, and essential professional development topics such as the responsible conduct of research and the principles of rigor and reproducibility in science. RIT U-RISE also collaborated with NTID's Department of American Sign Language and Interpreting Education (ASLIE) to develop new classroom and online courses for undergraduate and graduate interpreting students at RIT/NTID, focused on interpreting in research settings. RIT U-RISE also provides cultural competence training for hearing research mentors who work with deaf and hard-of-hearing U-RISE trainees. RIT U-RISE has developed partnerships with several research-intensive universities and institutions to facilitate opportunities for our trainees to participate in undergraduate summer research experiences and internships before applying to graduate programs in the biomedical sciences. For more information about the U-RISE program, visit rit.edu/ntid/rise/.

- Rochester Bridges to the Doctorate for Deaf and Hard-of-Hearing (D/HH) Students (RB2D)
  National Institutes of Health T32 GM150525   8/1/2023–7/31/2028
  MPIs: Bonnie Jacob (RIT/NTID) and Steven Barnett (UR) $1,441,249

The Rochester Bridges to the Doctorate program is a partnership between RIT/NTID and University of Rochester Medical Center (URMC) that aims to increase the number of deaf and hard-of-hearing master's degree students who go on to enroll in biomedical and behavioral science doctoral programs. The Rochester Bridges Program provides RIT MS-degree-seeking students, "trainees," with unparalleled mentored research experiences at RIT and UR. The trainees, who do mentored research at UR or RIT and take courses at both institutions, receive research stipends, tuition waivers, and conference travel funds. The program supported a total of five trainees during FY 2024. For more information about the Rochester Bridges to the Doctorate Program, visit rit.edu/deafscientists/.

Currently, two trainees are working on their MS degrees in environmental science, two in experimental psychology, and one in health management systems. Bo Allaby, a first-year Bridges trainee in experimental psychology, collaborates with Dr. Rebecca Houston, to investigate the effects of binge drinking and marijuana use by using EEG and neuropsychological measures. Bo's goal is to pursue a Ph.D. in Clinical Psychology. Hannah DeFelice, who is in her second semester of the Bridges program and in the environmental science program, works with Dr. Carmody McCalley on permaculture, particularly the impact of carbon cycles.

In addition to research-focused publications and presentations that Bridges trainees have completed with their research mentors, some trainees, faculty, and staff have disseminated information focusing on aspects of being a deaf researcher.

Kasper, A. M., Popov, V. A., Blick-Nitko, S. K., Kinast, K. B., Womack, K., & Cherry, N. D. (2024). Illuminating the deaf experience at STEM conferences. *Nature Reviews Chemistry*, 1-2. (Authors include U-RISE alumni as well).

Womack, K., Cherry, N.D., Kasper, A. M., Popov, V. A., Blick-Nitko, S. K., & Kinast, K. B. (2024). Interpreting in STEM: The Essentials for Working with Deaf Professionals. Chapter in *A Survey of American Sign Language/English Interpreting Settings*, an online open resource, Community College of Baltimore County Maryland.

Research (continued)

Ouellette, C., Jacob, B., Ayers, E., DeFelice, H., Levenson, D., McCalley, C., & Womack, K. (2024). [Deaf Hub at RIT: A Resource for All of Us.](#) arXiv Accessibility Forum, Cornell University.

- <u>Rochester Partnership to Advance Research and Academic Careers in Deaf Scholars</u>
  National Institutes of Health K12 GM106997   7/1/2021–6/30/2026
  MPIs: Stephen Dewhurst (URMC), $1,147,594
        Gerry Buckley '78 (RIT/NTID), Matthew Dye (RIT/NTID)

  This program began in 2015. In July 2021, NIH renewed this project for another five years. A partnership between rit/NTID, the University of Rochester Medical Center (URMC), and its National Center for Deaf Health Research, the "Rochester Postdoc Partnership" (RPP) offers learning opportunities at each institution to create a pipeline of deaf and hard-of-hearing scientists who have doctoral degrees, preparing them for careers in academia. The program's fellows engage in research activities at URMC laboratories and teach courses at NTID in their fields of expertise. The program has an excellent record of its fellows securing employment in academia. Every two years, this program hosts a national conference for deaf and hard-of-hearing persons interested in research and academia, drawing participants from around the country and facilitating applications to the RPP program. In August 2024, the fourth such conference was held in Rochester focused on the theme, "Bridging the Gap: Empowering Deaf and Hard of Hearing Students in Hearing Research Environments." For more information about the Rochester Partnership to Advance Research and Academic Careers in Deaf Scholars Program, visit [urmc.rochester.edu/academic-research-careers-deaf-scholars.aspx](#).

OTHER FUNDED RESEARCH AND OUTREACH EFFORTS

Communication Research

- <u>Critical Factors for Automatic Speech Recognition in Supporting Small Group Communication Between People who are Deaf or Hard of Hearing and Hearing Colleagues</u>
  National Science Foundation 1954284   10/1/2020–9/30/2025
  PI: Matthew Huenerfauth (RIT/Golisano College of $499,906
  Computing and Information Sciences)

  Study Director: Michael Stinson: Evaluation of Effects of Three Messaging Features During Problem Solving and Preparing a Prototype for Use in Future Studies

  In collaboration with Matthew Huenerfauth, this study is conducting implementation work related to the creation of a web-based prototype for an automatic captioning system that can support live meetings between a DHH and hearing individual. The goals of this work have been to ensure that the prototype could be instrumented to enable variations in its appearance and would be robust enough to support actual conversational interactions in the upcoming year of the project, e.g., for use in workplace communications. Work in Year 3 included piloting of the prototype and a problem-solving task that elicits conversation for a study that compares effects of messaging features when either (a) release of the message is speaker controlled, (b) when there is automatic release of messages, or (c) when correction of messages that have already been sent is supported. The prototype now includes automatic collection of data regarding time required to send messages and number of corrections of word errors that are produced. Collection of data for an experiment that evaluates the effects of these three messaging features on conversational interactions between a DHH and a hearing student in a problem-solving task has been completed for 26 pairs of participants (26 DHH; 26 hearing). Pilot analyses for these data focused on number of words exchanged between teammates, speed of transmission of words in WPM, and number of word errors corrected.

Research (continued)

Materials Reliability Research Lab (MRRL)

Marriner H. Merrill, Ph.D., director

The Materials Reliability Research Laboratory (MRRL) was established in August 2023. MRRL consists of deaf and hard-of-hearing student researchers performing fundamental and applied research at the intersection between advanced materials, processing, and usage to understand why materials degrade over time. To support this goal, we develop and perform advanced experimentation methods that combine and accelerate the effect of environmental conditions and mechanical stresses on material degradation. In FY 24, Dr. Merrill and seven deaf or hard-of-hearing students at the BS and MS level from the Kate Gleason College of Engineering, College of Engineering Technology, and NTID performed research in two major areas:

Internally Funded Projects (Start-Up Package)
- Corrosion and Cracking in Abrasion Resistant Steels

  Steels with high hardness of ~500-600 Brinell Hardness (HB) are used in construction, mining, and defense for their abrasion resistance. As the hardness increases, steel becomes more susceptible to environmentally assisted cracking and failures, particularly near welds. We evaluated more than 10 different commercially available steels from eight different mills with hardness ranging from 500HB to 600HB and thicknesses from 6 mm to 10 mm. Corrosion rate was evaluated using ASTM G31-21 with slight modifications. We also developed new fixtures and modifications to perform quench hardening testing. Lastly, we are developing a novel test technique to combine applied mechanical stress with corrosion to identify crack initiation rates in these steels.

Externally Funded Projects
- Environmental Degradation of Laminated Glass
  US Department of Defense and General Dynamics   1/1/2024–3/31/2025
  PI: Marriner H. Merrill $10,000

  Delamination of laminated glass / polymer laminates causes degradation of optical properties and costly replacement even when the materials themselves are still in good condition. "Accelerated aging" of new products using rigorous environmental chamber testing can provide ranking for which products will fail first, but it is still challenging to identify product service life from the environmental chamber testing. Analysis of ongoing testing of new parts with a range of thicknesses, materials, and integration methods provide essential data to develop improved mathematical correlations between chamber and service life.

Major Events
Please refer to the 'Student Research Activities' section for details on student involvement in research, including the annual "Deaf in DOD/Intelligence Research Symposium" held in Washington, DC, and the National Science Foundation's "New Energy New York" site visit in September 2024.

DEAF Math and Science Language Learning Lab (DMS-L3)

Chris Kurz '91, '95, Ph.D., director

This lab focuses on deaf experience related to language learning and conceptual understanding in mathematics and science. This lab is dedicated to understanding processes involved in accessing, acquiring, and producing content knowledge and skills with support of multimodal literacies, including American Sign Language and English. By studying how deaf people learn and use mathematics and science effectively, we can relate learning to practice at home and at school.

Research (continued)

- <u>58-IN-MIND: Multilingual Strategies for Diverse Deaf Learners</u>
  Co-edited textbook for pre-service and in-service teachers, published by Gallaudet University Press. Co-authored, with teachers of the Deaf, the chapters on Mathematics and Science. Book also includes chapters on Social Studies, Arts, Writing, Sign Language, etc.

- <u>NWEA Mathematics Data – The Impact of COVID Pandemic on Reading and Mathematical Learning</u>
  Worked with Georgia State University and California School for the Deaf, Fremont on a large NWEA Measures of Academic Progress (MAP) national data set, examining pandemic effects on deaf students' reading and mathematics performance using data from 2017-2023. Early findings have implications for understanding how the impact of the pandemic may vary and for using MAP scores for interpreting different rates of growth. Findings were presented at the AERA and CEASD conferences this year.

- <u>Mathematical Literacy Citizenship</u>
  Conducted interviews with deaf individuals about their mathematical literacy citizenship. Mathematical literacy includes the ability to understand mathematics through language, problem-solving, logic, and many other areas. Presented at and published a proceedings paper for the International Congress on Mathematical Education.

Language Experience, Sign Language & Interpreter Education Research Lab

Kim Kurz '93, '95, Ph.D., director

The main research focus is to investigate issues in sign language education and experience, and research methods and issues in sign languages.

In addition to publishing book chapters and peer-reviewed articles and presenting at national and international conferences, the director has been involved in numerous projects with the NTID Research Center on Culture and Language (CCL). Please refer to CCL projects 2b, 2c, 3c, 3g, and 3h earlier in this chapter for more information.

Center for International Educational Outreach

Thomastine A. Sarchet-Maher '03, '09, Ed.D., director

The mission of the Center for International Educational Outreach (IEO) at NTID is to share its expertise to help expand education opportunities for deaf communities outside of the United States. This is accomplished through partnerships and collaboration with deaf and hard-of-hearing leaders and institutions in other countries to build centers of excellence in deaf and hard-of-hearing education. IEO works to establish and expand opportunities for RIT/NTID students and faculty to participate in cultural, academic, and research exchanges between NTID and international organizations involved in educating and employing deaf and hard-of-hearing people.

IEO was established in 2016 to maintain and expand the global network of partnerships developed by RIT/NTID through the Postsecondary Education Network-International and Pre-College Education Network projects funded by Japan's Nippon Foundation. The center's main focus is sharing knowledge and expertise on best practices in the education and employment of deaf and hard-of-hearing people. Further, the center has received external funding to provide curriculum development, technical assistance, research assistance, and workshops to deaf education professionals in several countries.

Externally Funded Projects
In FY 2024, IEO continued their partnership with RIT/NTID faculty to lead two externally funded projects.

Research (continued)

- <u>Establishment of Centers on Employment for the Deaf in the Philippines and Viet Nam (Year 3)</u>
  The Nippon Foundation of Japan: 2023035786   2/1/2024–1/31/2025
  PI: Thomastine Sarchet-Maher '03, '09 $610,140

  The primary objective of this project is to develop two self-sustaining Centers of Employment to support the education and employment of people who are deaf or hard of hearing in the Philippines and Việt Nam that will be self-sustaining at the end of Year Five. The proposed project includes establishing National Centers of Employment in the Philippines and Việt Nam that would provide comprehensive support for employees seeking employment as well as support for businesses seeking support in hiring deaf employees. The Centers of Employment will employ counselors to assist deaf job-seekers with the resume/application process and interviewing skills. The centers' counselors also will work with local businesses to advocate for the employment of deaf people and provide expertise on how to utilize resources such as interpreting, captioning, and emerging technology to ensure successful employment.

- <u>Developing a Flagship Program for Deaf, Hard of Hearing and Hearing Students in Europe</u>
  US Department of State – Bureau of Educational and Cultural Affairs: 8/1/2023–7/31/2025
  AID-OAA-A-13-00074 / PO31908
  PI: Jenny Sullivan; Co-PIs: Thomastine Sarchet-Maher '03, '09, $86,142
  James Myers

  This project will pilot a new four-week summer direct-enroll program at our global campus in Zagreb, Croatia. A cohort of 20-30 deaf, hard-of-hearing, and hearing students would earn three credits in a course called Deaf Culture in Europe. The course would include several excursions and activities and a week-long trip that would take the group to another country in Europe to immerse in local Deaf culture. A blend of deaf, hard-of-hearing, and hearing students would greatly enhance the diverse perspectives explored and the learning outcomes would be designed to benefit local Deaf communities, not just RIT. Because of the close and trusted relationships that deaf and hard-of-hearing students have with RIT/NTID faculty, a Rochester-based faculty member would travel to Croatia for the entire duration and teach the course, relying heavily on local partners and experts in the community. Croatia's proximity on the continent, support of our local staff, and affordable summer tuition rates, make it an ideal location.

Global Partnerships
In FY 2024, the Center for International Educational Outreach continued to engage with existing partners in Italy, France, Japan, and the Philippines. Due to the pandemic, many partnership activities have been on hold. The center has been working on renewing agreements with these partners with the goal to initiate more in-person exchanges for teaching and research in FY 2024 and beyond.

Visiting Scholars and Delegations
In FY 2024, the center hosted the following international groups at NTID:
- Omani Association for the Hearing Impaired
- National Tsukuba Institute of Technology and Juntendo University Graduate School of Medicine
- South Korean Delegation from Daegu University, Hanyang University, Gyeseong High School, Kangnam University, Sookmyung Women's University, Nazarene University, Seoul National School for the Blind, and the Hankuk University of Foreign Studies

Study Abroad Experiences
In FY 2019, NTID's study abroad programs were reorganized into the Center for International Educational Outreach. In recent years, NTID has offered a study abroad program through a three-pronged approach: 1.) NTID faculty-led study abroad experiences, 2.) sending students to an affiliated university with established curriculum (offered by the affiliated university and/or NTID faculty), with housing and access services provided, and 3.) exchange programs (partnership with educational institutions that allow

students to directly enroll for five weeks). These programs are offered for three general education credits under International Studies Seminar. They are open to all NTID-coded students at RIT, including the MSSE and ASLIE programs.

For FY 2024, NTID developed a faculty-led program to France. Twenty-three students and three faculty visited cultural and historical sites in the cities of Paris, Marseilles, Toulouse, and Carcassonne. Excursions included visits to the Eiffel Tower, the International Visual Theater, St. Jacques Deaf School, Versailles, the Louvre, and Arc d'Triomphe.

Substance and Addiction Intervention Services for the Deaf (SAISD)

Keven Poore, program director

Ongoing funding
NYS Office of Addiction Services and Supports (OASAS)
Monroe County Office of Mental Health
DHHS Substance Abuse and Mental Health

SAISD has been in continuous operation since 1979. The five staff members of SAISD provide alcohol, tobacco, and other drug information/referral, prevention/education, intervention, cross-disability professional consultation, and training and support to treatment programs. The target population served includes the deaf and hard-of-hearing student population at RIT/NTID and the deaf and hard-of-hearing community in Monroe County and 15 surrounding counties in upstate New York (approximately 55,000 individuals). SAISD has increased its use of social media, videos, and informational campaigns.

STUDENT RESEARCH ACTIVITIES

Todd Pagano, Ph.D., executive director for professional and student scholar development

RIT and NTID place significant emphasis on student involvement in research. RIT's strategic plan discusses the "Student-Centered Research University" as one of the five tenets of the RIT plan for "greatness through difference." NTID's strategic plans also highlight the importance of student participation in "Innovation and Scholarship Research." Through participation in the research process, students can enhance their content knowledge, self-confidence, and educational/professional aspirations. NTID has become a leader at RIT in supporting students in research projects.

FY 2024 was a fruitful year for student involvement in research. Student researchers took advantage of funding opportunities to support their research and present their research at professional conferences. Several student researchers were listed as co-authors on peer-reviewed published journal articles.

Support for Student Involvement in Research

Beyond individual faculty researchers' efforts and fiscal support for engaging students in research activities, student researchers took advantage of all three of NTID's main support programs to encourage student involvement in research this past year:

- Student research micro-grants: Students (with approval of a faculty mentor) can apply for up to $1,000 in funding to support a specific research project. For example, students can request funds to purchase a specific software program or chemicals or to pay subject fees.

- Summer Undergraduate Research Fellows (SURF): Funds have been allocated to support NTID undergraduate students conducting research under the direction of a faculty mentor during the summer term. Funds are used to pay student stipends.

- Conference travel awards: Undergraduate students who have made significant progress can apply for funding to travel to a professional conference and present their findings.

Research (continued)

NTID also provides research poster printing services for students who present posters at professional conferences. Finally, given that involvement in faculty-guided research can be among the best learning opportunities for our students, most NTID academic programs now have undergraduate research courses that are available for student enrollment.

Dr. Jason Nordhaus has received three awards that provide research experiences for deaf and hard-of-hearing students through discipline-based research, including the following two active awards:

- Brief But Spectacular: New Windows into the Physics of Common Envelope Evolution
  National Science Foundation: AST-2009713   7/1/2020–6/30/2024
  PI: Jason Nordhaus $341,225

  This award supports two deaf and hard-of-hearing students for a summer research experience for each year of the award with a project team studying the physics of common envelope evolution. A variety of exotic compact objects are formed when two stars merge. This requires a close binary orbit. One common way to shrink the orbit of two binary stars is during a "common envelope" phase (CE). This phase only lasts a local year, but it is transformative. The star with the most mass swells as it grows old and engulfs its companion. The resulting friction reduces the distance between the stars. Progress in understanding this brief but important phase in stellar evolution has been hampered by a lack of observational data to test the models. Only two post-CE systems have been identified. The team will conduct a large-scale systematic search in hundreds of open star clusters. Once the post-CE systems are identified, the team will determine the orbital properties of the binary system, the temperatures and masses of the binary stars, and age of the stellar cluster. Using this data, the team will be able to place tight constraints on both the pre- and post-CE phases. For the first time, theorists will be able to match the simulations to a set of real outcomes drawn from this new catalog of post-CE binary stars.

- Collaborative Research: Breaking Barriers in Multi-messenger Astrophysics: The RITTU Partnership
  National Science Foundation: AST-2319326   9/1/2023–8/30/2026
  PI: Jason Nordhaus $313,778

  A new research and education partnership in astronomy is being developed between RIT and University of Maryland Baltimore County with the aim of exploring how to break both disciplinary and cultural boundaries to solve key questions in neutron-star astrophysics. RIT hosts NTID, one of the premier deaf education institutes in the world, and UMBC is a Minority Serving Institution. The two-year program will explore authentic pathways for deaf/hard-of-hearing and underrepresented undergraduate students to join the RITTU partnership and participate in academic year preparation programs and summer research experiences. The students will acquire a set of skills that cross between theory and observations and will be supported by a dedicated mentoring team, thereby placing them in competitive positions for graduate programs or other STEM careers.

  The next few years will herald a golden age for the astrophysics of neutron stars, which are compact stellar objects, often synonymous with pulsars, and which are one of the end stages of massive star evolution. Neutron stars and mergers of binary neutron stars can be observed through multiple messengers: gravitational waves (GWs), electromagnetic radiation and potentially neutrinos offering unparalleled opportunities to answer fundamental questions in astrophysics. The program will involve two inter-related studies. The study of binary neutron star mergers will reveal the formation mechanism of the Universe's heaviest elements, probe the generation and structure of the most powerful astrophysical jets, and elucidate the characteristics of the remnant population of massive stellar evolution. In the topic of neutron star astrophysics, the team will develop new tools to shed light on pulsar glitches and use pulsar timing observations to guide searches for burst and continuous GWs. This award advances the goals of the Windows on the Universe Big Idea.

Research (continued)

Deaf in DOD / Intelligence, September 2024

Thirty NTID students and faculty attended the third annual "Deaf in DOD / Intelligence Research Symposium" in Washington DC. This event brings together deaf and hard-of-hearing scientists, engineers, and students from the DOD and the Intelligence Community. NTID students gave research presentations, met with hiring managers, and toured laboratories. This year, students from the colleges of NTID, Kate Gleason College of Engineering, College of Engineering Technology, and B. Thomas Golisano College of Computing and Information Sciences participated. On September 17, students toured the CIA or the Naval Surface Warfare Center Dahlgren (NSWC Dahlgren) and participated in network events. On September 18, the full group met at the US Naval Research Laboratory for more tours and technical talks. The keynotes were both by NTID alumni: Kyle "Bair" Brossoit '14, an explosives expert and program manager at NSWC Indian Head, and Cham Leang '03, a program manager in the federal government. Research presentations from NTID were given by Hayden Orr, Natnail Tolossa, Brittany Morris, and Evan Strickland. All three laboratories were tremendously impressed by the quality of the students who attended, and they encouraged students to apply for co-op and permanent positions.
The trip was organized by Dr. Marriner H. Merrill with support from Mark Sommers, Marcus Holmes, Mark Jeremy, Brian Nadworny, and DJ Monahan. It was supported by the NRSC, NCCC, and the Departments of Engineering Studies and Information and Computing Studies. "Deaf in DOD" was founded by Dr. Merrill and Agron Deski '23 (BS/MS in Mechanical Engineering Technology) in 2022. Agron Deski, now a permanent employee at the US Naval Research Laboratory, chaired the meeting.

National Science Foundation, "New Energy New York" Site Visit, September 2024

NTID students and faculty played a key role in the recent National Science Foundation (NSF) site visit at RIT for the multi-million dollar "New Energy New York Engine." Visitors – who included a Nobel Laureate and top-level NSF program managers – met with Gary Behm, toured a Precision Manufacturing Technology class taught by Trisha Gard-Thompson, visited the Cross-Registered Support Center led by DJ Monahan, and then had a panel discussion with cross-registered students to discuss barriers and obstacles to advanced degrees in engineering. Dr. Marriner H. Merrill coordinated the visit as part of development of new educational and training opportunities in energy storage – from technicians to PhDs.

Student Research Fair at NTID

In April 2024, 33 student researchers gave presentations on 22 projects at NTID's Annual Student Research Fair. In the weeks leading up to the event, students had the opportunity to participate in a set of faculty-led workshops that focused on writing a research abstract, creating a research poster, and presenting at conferences.

Members of the RIT community, including NTID's National Advisory Group, attended the fair to interact with the student researchers. Projects presented came from the fields of health science, chemistry, education, communication studies, environmental science, psychology, and more.

RIT's Undergraduate Research Symposium

Each year, RIT hosts a large undergraduate research symposium. In summer 2024, NTID-supported students disseminated their research with either posters or symposia presentations. NTID student research was supported by federal grants, internal awards, or faculty start-up funds. The projects represented both discipline-based research and center-based research that explore deafness and the deaf experience.

Imagine RIT: Innovation and Creativity Festival

RIT held its annual Imagine RIT: Innovation and Creativity Festival April 27, 2024, featuring more than 300 exhibits involving science, technology, engineering, the arts, and mathematics. NTID students, faculty, and staff, volunteered and exhibited at the festival, including the list of exhibits below.

The 16th annual *Imagine RIT: Innovation + Creativity Festival*, a one-day celebration of RIT's unique blend of technology and the arts, was held on campus April 27, 2024.

NTID student, faculty, and staff exhibits included:

- **PLAY Lab**: The Mind and Brain exhibit featured several interactive activities for children ages 3 and up.
- **PopSign**: PopSign is an app that makes learning American Sign Language fun and interactive. The aim of the game is to pop as many bubbles as possible, matching a written word with an ASL sign on the bottom of the screen. It is intended to educate parents with deaf and hard-of-hearing children in ASL, but it is open for anyone who wants to learn sign language and fingerspelling. It is still in beta-testing mode, but can be downloaded from Google Play Store. The Center on Access Technology, along with Google and Georgia Tech, is working on perfecting and making it available on the Apple App Store.
- **Retro Revival: Classic Snake Game with a Modern Twist**: An engaging and interactive exhibit showcasing a classic favorite, the Snake game, innovatively reimagined using a custom-designed printed circuit board with an STM32 microcontroller and SNES controllers.
- **3-D Printed Model of a Difference Engine for the Stage**: This exhibit blended new science and old and examined the intersection between performing arts and technology. Visitors had a hands-on experience, engaging with the model and making it move. They learned more about the Difference Engine—a precursor to the computer—and the process of transforming a piece of history into a contemporary prop for the stage.
- **Discovering ASL & Deaf Culture in our Diverse Deaf Community:** This exhibit offered a variety of activities: (a) children used rubber stamps to make manual alphabet bookmarks; (b) received information about various sign languages, including ASL; (c) experienced protactile ASL; and (d) watched an ASL story video. Visitors also learned about Deaf and DeafBlind communities through simulations.
- **Deaf Health Care and Biomedical Science Hub:** Exhibit included human anatomy models, Kahoots!, and paper to complete statements such as "We need deaf and hard-of-hearing scientists because…".
- **Proof of Purchase and Dangerous Signs performance**: These two groups performed a 15-minute set, including an a cappella song, an a cappella song with poetic ASL performance, and a poetic ASL performance.

All of the exhibits, activities, and performances demonstrated the innovative thinking and creative spirit and energy that are uniquely RIT; they exemplify RIT President David Munson's vision of RIT as a creative and innovative university that leverages the power of technology, the arts, and design for the greater good.

Innovation and Creativity at NTID

Over the last decade, RIT has increased its emphasis on innovation and creativity, both in the curriculum and in other activities across campus.

The sampling of projects below reflects the innovative and creative activities underway within the National Technical Institute for the Deaf.

Digital Classroom Technology for ASL and Interpreting Instruction

ASLIE's three department classrooms are each equipped with four HD cameras, three "smart" microphones, three large-screen televisions, a white board, and a teacher's station with an Apple computer. The technology is controlled by a specially designed touchpad and camera controller. Additionally, each classroom is equipped with headsets with microphones for students, and there are spare laptops for students to use as needed. The classrooms employ Apple's wireless technology to connect faculty and student devices to the TVs. Capturing student work or presentations is done with GoReact, a web-based video capture and storage program, or with other applications such as Zoom, Photo Booth, or QuickTime.

Keeping Current in Communication Studies and Services

The Communication Studies and Services (CSS) department recognizes the exciting benefits of emerging technological trends to enhance communication access for deaf and hard-of-hearing individuals. CSS faculty and staff continuously participate in training activities to remain current and share these communication-related resources and options with students. Recent examples include:

- **Increase Support for Neurodiverse Community:** Neurodiversity training and development within CSS to expand awareness and streamlined support for neurodiverse students within NTID.
- **Mobile applications (apps)**: There are myriad new and evolving apps that can be used as tools for communication and accessibility. The faculty and staff in the CSS department actively encourage and train students to use these apps to maximize their communication potential. Trending apps explored with students include those designed for automatic speech recognition, team communication, live captioning of mobile phone calls, and real-time hearing device adjustment. Furthermore, to improve access for deaf and hard-of-hearing students, the department has maintained relationships with app developers to explore adaptations.
- **Future developments:** CSS is working with instruments that are Auracast™ ready and preparing for the widespread implementation of this new broadcast technology.
- **Hybrid delivery options for speech-language services:** The speech-language pathologists at NTID continue to provide students with meeting options to engage in virtual and/or traditional in-person formats. Students today are facing a heightened need to solidify their virtual communication skills given the global shift to virtual classes, meetings, interviews, and teamwork. Speech-language sessions at NTID, in this way, are serving to prepare students to become confident and successful communicators in both face-to-face and virtual environments.

CSS remains current with regard to emerging research on electroacoustic hearing configuration, or the use of both electrical stimulation (cochlear implant) and acoustic amplification (hearing aid). Research has suggested improvements in several areas, including music appreciation, general sound quality, and speech understanding, particularly in noise. Acoustic components now are available for use with current speech processors from all three major cochlear implant companies, allowing for even more students to benefit from a cochlear implant, if they choose. NTID audiologists have been trained to work with these devices and counsel prospective candidates on expected outcomes.

This research also indicates that the benefits of electroacoustic hearing are observed even when the electric and acoustic stimulation are on opposite ears (bimodal configuration). The CSS faculty and staff have observed that many students coming to college with just one cochlear implant are curious about technology for the contralateral ear, but have either been discouraged from use of a second device or are nervous about the outcomes, due to an extended period of auditory deprivation on that side. The Audiology Center provides semester-long loans of current hearing aid technology so that students can decide whether a bimodal configuration is right for them.

Innovation and Creativity at NTID (continued)

In addition to departmental pursuit of ongoing training in communication-related topics, CSS faculty and staff are actively initiating or invited to participate in various research initiatives across the fields of audiology, speech-language pathology, accessibility, and deaf education. Recent projects have focused on:

- use of wearable vibrotactile haptic devices to enhance speechreading, environmental sound awareness, and to manage symptoms of tinnitus
- evaluation of automatic speech recognition technology to increase accessibility and usability for DHH speakers
- use of mobile applications to enhance cross-cultural communication
- online learning initiatives for deaf learners
- usability of automatic speech recognition for telephone captioning
- effects of moisture on the lifetime and daily function of hearing aids and cochlear implants

A significant uptick in requests for professional counsel and support for the University's LGBTQIA+ student population resulted in the creation of an ongoing collaboration between CSS speech-language pathologists and RIT's Women, Gender, and Sexuality Resource Center (WGSRC). Direct communication group sessions for gender-affirming voice coaching have been routinely frequented by students, hearing and deaf alike.

The expertise of the CSS department regularly is sought and shared within the institute, as well as externally. Consulting and training of best practices in education, communication skill development, and language access also are shared internationally in Ethiopia, where a CSS audiologist is routinely part of a volunteer initiative to empower an Ethiopian Deaf community.

NTID Performing Arts

The department's 50th season in AY 2023-2024 presented three mainstage productions and several special events that involved more than 2,500 deaf, hard-of-hearing, and hearing students, faculty, staff, and Rochester community members. They participated as actors, dancers, theater technicians, and front-of-house staff. The Panara Theatre reopened in Spring 2024 after renovations were completed. Three productions took place in various locations – Dyer Arts Center, The SHED, and Panara Theatre. These performances were attended by more than 930 people from throughout New York State, as well as schools and community groups from neighboring states. During NTID's 55th Anniversary in 2023, the department provided tours of their newly renovated spaces for alumni, RIT's Board of Trustees, and students from local high schools.

This season included a joint production of *Thy Name Is Woman*, co-created by Dr. Jill Bradbury, Andy Head, and Alexa Scott-Flaherty. Three Deaf actors received awards from the 2024 Kennedy Center American College Theatre College Region II Award, held in Pittsburgh, Pennsylvania, in January. Ace Gray won the Irene Ryan Acting Scholarship Competition. Serena Rush received the best classical acting award. She also directed a 10-minute play for the National Playwriting Program and was recognized with the Outstanding Ensemble Performance award. McClain "Mac" Leong was one of eight finalists to participate in the national competition in Washington, D.C. as a stage management fellow.

RIT and NTID Performing Arts hosted the very first performance, *AstroDance II: Across the Universe*, at RIT's newly constructed Student Hall for Exploration and Development (SHED) in the Sklarsky Glass Box Theater. Thomas Warfield conceived, directed, and choreographed a variety of dances, aerial arts, and augmented reality segments. This event was dedicated to honoring the memory of Dr. Joseph Bochner, former chair of the Department of Cultural and Creative Studies, who encouraged Thomas to attend the Science and the Arts conference at CUNY Graduate Center many years ago. This year, two RIT students who participated in RIT Dance, Katie Miller and Sam Sit, were members of the Rochester City Ballet.

In April, the NTID Department of Performing Arts presented the fourth *Deaf Creators Play Festival* in the Robert F. Panara Theatre after the theater reopened following the completion of renovations.

Innovation and Creativity at NTID (continued)

Featuring one-act plays by diverse deaf and hard-of-hearing playwrights, the festival was directed by NTID Performing Arts faculty JW Guido and student Gail Gonzalez. The three one-act plays were: *Jovita and Esperanza* by Dr. Steve C. Baldwin, focusing on two Tejano sisters – one Deaf and one hearing – and their family struggles in 1950s Texas; *The Reunion* by Dr. Jill Bradbury, where three classmates attend a reunion at The New School for the Deaf, reminiscing about their pasts and revealing old secrets, exploring the possibility of abuse in residential schools and what has been lost with the rise of mainstreaming; and *Naturalization* by Willy Conley, which focuses on U.S. immigrant Felicia, who is assigned an interpreter-in-training for her citizenship interview.

Thy Name Is Woman had 200 attendees, *AstroDance II: Across the Universe* had 490, and the *Deaf Creators Play Festival* had 246.

During AY 2023-2024, 673 students enrolled in Performing Arts in-person and online classes. Twenty-two students were awarded performing arts scholarships. The NTID Department of Performing Arts successfully launched four new minor and immersion programs: Theatre Design and Stagecraft Minor, Theatre Design and Stagecraft Immersion, Dance Minor and Immersion, and ASL Performance Minor. The number of students has increased since last year. Theatre Design and Stagecraft had six students enrolled in the minor and 30 students in the immersion. The Dance Minor and Immersion have significantly increased; four students in the Minor and 27 students in the Immersion. The ASL Performance Minor has one student. The total number of students is 65.

In total, approximately 4,709 people were served by NTID's Performing Arts program during the AY 2023-2024 season.

Showcasing Deaf Artists

A team of NTID faculty and staff developed a website that showcases and promotes the works of Deaf and hard-of-hearing artists (deaf-art.org/). The site features art and biographical information on more than 100 professional Deaf artists from around the world, as well as streaming videos and articles related to Deaf artists, Deaf art, and Deaf artistic movements. The site offers a range of accessible materials for classroom use, including visual timelines, a summary of popular Deaf motifs, free access to scholarly articles regarding Deaf art, and more. Also included on the site are the self-portraits of a group of RIT/NTID students, along with video and/or written descriptions.

Preserving Deaf History

The experiences of Deaf people during World War II are captured in a website developed by a team of NTID faculty and staff (deafww2.com/). The site focuses on three spheres of the world involved in this conflict, as Deaf North American, Deaf European, and Deaf Asian peoples' lives are examined before, during, and after the war. Designed for students, teachers, scholars, researchers, and historians, the site features articles, scripts, video clips, testimonies, artwork, books, and links to related sites. Also included is an award-winning NTID documentary, *Exodus: A Deaf Jewish Family Escapes the Holocaust*, and the documentary, *Worry: A Jewish Deaf-Blind Survivor Shares Her Story*.

The HeART of Deaf Culture: Literary & Artistic Expressions of the Deaf Experience

This multimedia interactive website, produced and edited by retired NTID faculty members Karen Christie and Patti Durr, explores Deaf visual art, ASL and English literature, Deaf theater, and Deaf cinema. It contains in-depth interviews with Deaf scholars and creators from each genre, and features more than 300 artworks, poems, ABC stories, performances, and film clips: heartdeaf.com/.

Deaf Studies Archive

The RIT/NTID Deaf Studies, Culture & History Archive (www.rit.edu/archives/ritntid-deaf-studies-archive) documents RIT's central role in educating people who are deaf or hard of hearing in the United States.

Innovation and Creativity at NTID (continued)

This archive also draws from Rochester's significant Deaf community. The focus of the popular and continually growing archive is Deaf culture, studies, education, theater, and art.

This significant and popular archive contains primary resources, artwork, videos, and books documenting the founding and growth of NTID, and highlights the many remarkable contributions of deaf, hard-of-hearing, and hearing individuals affiliated with NTID. The Rochester area is home to a vibrant Deaf community, and the Deaf Studies Archive represents a first-time effort that has been made to preserve some record of this culture. Including, but not limited to, the papers of distinguished faculty, artwork by alumni, and the records of a local deaf theater group, this growing archive (more than 250 collections) showcases the many talented and dedicated individuals affiliated with NTID and beyond.

The Deaf Studies, Culture & History Archive (infoguides.rit.edu/dsa) is located in the RIT Archives in the Wallace Library and is curated by NTID librarian, Joan Naturale, and RIT archivist, Elizabeth Call. The NTID librarian also teaches Deaf Studies classes.

In spring and summer of 2024, the NTID Alumni Office Director, Loriann Macko '94 and Amelia Hamilton '20, assistant director of Alumni/Student Mentoring & Special Projects, visited the Deaf Studies Archives to select photos, documents, and items for the NTID Alumni Museum known as "The Street," opened October 2024. Joseph Fox '06, marketing communications specialist for the NTID Department of Performing Arts, also visited the archives to select posters, photos, and related materials for the 50th anniversary of NTID theatre exhibit, which also opened in October. Tabitha Jacques from Gallaudet University requested a loan of a Deaf Native art piece by Sarah Young-Bear for their Deaf Native exhibit. Jeanne Behm has borrowed Deaf artworks for the RIT Deaf Studies and Community Studies Center (RADSCC), where she serves as coordinator.

In summer 2024, NTID Librarian Joan Naturale and a student worker provided metadata for frequently requested photographs. The Deaf Studies, Culture & History Archive staff has posted these photographs as well as documents, articles, and videos in its growing Digital Collections: digitalcollections.rit.edu/luna/servlet/RIT~7~7. In addition, rare NTID theatre videos were digitized and funded by the NTID's President's Office. They are posted in the library's YouTube channel. Some are public videos (such as TTY History videos, *Hey Listen*, a Deaf-run television program that conducted interviews with members of the Deaf community on popular topics, NTID Founding Director Dr. Robert F. Panara presentations, and performances) and others are unlisted as we await voicing and/or captions to make them accessible. https://www.youtube.com/channel/UCVnYnjKyNuv7eVYQmTe8aIw

NTID Deaf Studies Archives, Culture & History staff (Jen Roeszies and Landyn Hatch) completed an extensive finding aid guide on NTID Administrative Records (64 cartons). We have a comprehensive collection of the Empire State Association of the Deaf records and a finding aid developed by Julia Novakovic, digital archivist.

RIT ASL & Deaf Studies Community Center (RADSCC)

The RIT ASL & Deaf Studies Community Center (RADSCC) continues to promote education, understanding, and participation in the RIT/NTID Deaf community by all members of the RIT/NTID community. A variety of events, ranging from weekly ASL classes to regular community meetings, are hosted in the RADSCC space, which is located in RIT's Wallace Center. As of October 2023, and after two years of temporary housing in the Gordon Field House, the RADSCC returned to its permanent home in the newly renovated Wallace Center, directly adjacent to the newly opened Student Hall for Exploration and Development (SHED).

In April 2024, the RADSCC again participated in Imagine RIT, RIT's annual Creativity and Innovation festival. This year's exhibits were held at the lounge of the RADSCC and in the classroom. The event included various children's activities, bookmarks, and learning signs; ASLIE's poster display; students' interpreting scenarios; and NTID Sign Language and Resources Center. The event was well attended by deaf and hearing individuals alike.

Innovation and Creativity at NTID (continued)

The RIT ASL at Lunch series continues to be a popular campus activity. During these weekly gatherings, members of the Deaf and hearing community with widely varying familiarity of Deaf culture and skill level in American Sign Language come together to socialize, converse with faculty, staff, and students, and experience Deaf culture.

The RADSCC continued hosting its ASL Lecture Series, both in person and online. Participation in these lectures continues to be strong and the dual participation modality option ensures lectures are accessible to audiences both on and off campus. This year's lectures included *Higher Education and Sign Language Policy by and for Deaf Students* presented by Edgar Corres Veras and Thomas Holcomb who presented, *Deaf Centered Interpreting: The answer we've been looking for?* Past presentations can be found at rit.edu/ntid/radscc-presentations-asl.

Sunshine 2.0

Sunshine 2.0 is a professional traveling theater troupe based at NTID in the Department of Performing Arts. The troupe provides performances and activities for deaf and hard-of-hearing children and adults that highlight the fields of science, technology, engineering, the arts, and math (STEAM), as well as educational topics pertaining to the Deaf experience. They also perform and give workshops at many conferences and festivals (virtually and in person) to reach the community at large. In FY 2024, they continued to provide virtual and in-person performances at conferences, festivals, and expos in order to reach students and families both in and outside of traditional educational settings. They were able to connect with school administrators, school faculty and staff, and Deaf organizations (interpreter agencies, youth programs, community organizations). These performances and workshops involved approximately 13,513 youth and adults and were hosted at 23 sites in the following states: Alabama, California, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Missouri, New Jersey, New York, North Carolina, Washington State, and Washington, D.C.

Sunshine 2.0 attended the NTID 55th Anniversary Reunion, Deaf Visual Arts Festival, Virtual Vernacular Festival, American Deafness and Rehabilitation Association (ADARA) Conference, National Association for the Deaf (NAD) Conference, Usher Syndrome Coalition Connections Conference, Bay Area International Deaf Dance Festival, Cape Cod Deaf Expo, Association of Late-Deafened Adults (ALDA) Conference, and Southeast Regional Institute on Deafness (SERID) Conference to promote NTID and provide performances and workshops related to STEAM and Deaf culture.

Sunshine 2.0 also had presentations, workshops, and performances for RIT/NTID students in FY 2024.

TigerChat™

TigerChat™ is a communication app developed by NTID to help the RIT community eliminate communication barriers. Members of the RIT community can use TigerChat to converse using automatic speech recognition (ASR) technology and typing. The app displays the conversation as it happens, which helps provide a more natural flow of communication. TigerChat has proven beneficial with spontaneous communication, meetings, or point-of-service locations.

ASLCORE

Specialized vocabularies used in academic disciplines often lack established ASL signs. Interpreters often fingerspell these words or develop ad-hoc signs that can be unclear and potentially confusing. ASLCORE (aslcore.org/) began with an NTID innovation grant in 2015 with the goal of developing and making available online new signs for advanced concepts in philosophy courses. After initial success, the ASLCORE website expanded to include discipline-related terminology in art, biology, computer science, engineering, literature, physics, and sustainability. All ASLCORE signs are generated by Deaf users of ASL via a team of Deaf content experts and Deaf translators who have native fluency in ASL. With more than 1,500 total entries, ASLCORE also collaborates with a similar project, ASL Clear, a partnership between Boston University's Center for the Study of Communication

and the Deaf and The Center for Research and Training at the Learning Center for the Deaf in Framingham, Massachusetts.

Dyer Arts Center

In AY 2023-2024, NTID's Joseph F. and Helen C. Dyer Arts Center held 40 in-person events, encompassing receptions, conferences, VIP meetings, and educational visits, drawing more than 10,000 visitors. The center's reach extended significantly within the Deaf community on both national and international fronts.

Among the highlights were six exhibitions:
1. "Matchlight: Illuminating Deaf Identity, Mental Health and the Therapeutic Process of Art" showcasing works by Rubbena Aurangzeb-Tariq, a London-based artist and art therapist.
2. "Brilliance," an exhibit featuring the glass mosaic work of the late Melissa Skyer '04, '06.
3. "The Mechanical Smile," an exhibition featuring the work of Kevin Araujo whose work explores the complexities of human emotions, technological integration, and the continuous evolution of our interactions.
4. "Black. Deaf. Art. Period." an exhibit curated by Earl Terry, which demonstrates the vulnerability of each Black Deaf person's lived experience and storytelling through painting, sculpture, clay-molding, written words, and more.
5. "Resonances," an exhibit by Janhavi Khemka, a Chicago-based artist who approaches acoustics through woodcut printmaking and experimental installations composed of animation, sound, performance, and vibratory material.
6. "Visual Communications Study Faculty Exhibit," featuring premier artwork by faculty in the NTID Department of Visual Communication Studies program.

The year saw shifts within the Dyer Arts Center team, marked by the departure of the director of the Dyer Arts Center and support staff. Marissa Woodruff '16, '18, '24, now oversees operations of the Dyer Arts Center. Woodruff had four years of previous work experience in the Dyer Arts Center and most recently served as NTID assistant director of Alumni and Constituent Relations.

NTID students, faculty, and staff contributed exhibits, activities, and performances to RIT's annual Imagine RIT: Innovation + Creativity Festival, *held in April.*

Intellectual Property: Licensed Educational Materials, Patents, and Inventions

NTID educational materials developed after RIT's Intellectual Property Policy was implemented in October 1997, are licensed, and the sales revenue is shared by the creator(s) of the materials and NTID, per the requirements of the policy. All materials are copyrighted to Rochester Institute of Technology and are available through a variety of vendors. Below is a summary of the materials and distribution information.

Licensed Educational Materials

- *Attention Deficit Scales for Adults - Sign Language Version*
  Distributed through NTID Communications, Marketing and Multimedia Services

- *ASL at Work* (textbook with accompanying DVD)
  Distributed by Dawn Sign Press

- *ASL Dictionary and Inflection Guide*
  Available for online subscription through rit.edu/ntid/dictionary/

- C-Print® Pro Software and C-Print® online training
  Distributed through NTID College Operations

- *Educational Interpreting* (DVDs and companion booklet)
  Distributed through Harris Communications, Butte Publications, and NTID Communications, Marketing and Multimedia Services

- *NTID Speechreading* (DVD and supplementary materials)
  Distributed through AUDiTEC

- *A Shining Beacon: Fifty Years of the National Technical Institute for the Deaf* (hardcover book)
  Distributed through NTID Communications, Marketing and Multimedia Services and RIT Press

Patents/Inventions and Copyrights

- U.S. Patent granted by U.S.P.T.O. for "Method for Determining Hearing Thresholds in the Absence of Pure-Tone Testing." Date of Patent: December 5, 2017. Patent Number: US 9,833,174 B2. Available for license.

- Provisional Patent filed with U.S.P.T.O. for "Method for Measuring Sign Recognition Ability in Learners of American Sign Language (ASL) as a Second Language." Application date: July 18, 2017. Converted to non-provisional June, 2018.

- Trademark NTID Speech Recognition Test® (NSRT®).

- Translation to ASL of the Connor-Davidson Resilience Scale (CD-RISC), by NTID's Research Center on Culture and Language through an agreement between Connor-Davidson and the University of Michigan.

- An ASL Dictionary and Inflection Guide translation to South African Sign Language via license agreement from NTID through the ASLIE Department.

- Translation agreement to digitize and make publicly accessible more than 60 videotapes held in the RIT/NTID Deaf Studies Archive through a grant from the Council on Library and Information Resources (CLIR).

- "Method and System to Enhance Telecommunication Relay System for People with Disability." Provisional patent filed February 14, 2019. Converted to non-provisional filed February 14, 2020.

Outreach

A primary goal of NTID's Pre-College Outreach Programs is to better prepare deaf and hard-of-hearing middle and high school students for college.

Outreach Highlights

NTID's educational outreach efforts include a number of innovative programs designed to share educational information and provide career exploration assistance to teachers of deaf and hard-of-hearing students, Vocational Rehabilitation personnel, secondary and middle school students, and parents of deaf and hard-of-hearing children.

Pre-College Outreach Programs

Outreach is responsible for arranging camps and competitions for deaf and hard-of-hearing middle and high school students. To reach as many students as possible, Outreach's programs are conducted on-campus, off-campus, and online.

Outreach conducted several in-person programs.

- **Explore Your Future** (EYF), the flagship program of the department, is a week-long career exploration and evaluation program for deaf and hard-of-hearing students about to enter their junior or senior year of high school. It has been one of NTID's most successful outreach programs. EYF provides opportunities for high school students to learn about themselves and their educational and life/career choices.

- **Tech Tigers** is for middle school deaf and hard-of-hearing students. This week-long program is for students entering 7th, 8th,or 9th grade who are interested in careers in science, technology, engineering, and math. Attendees use state-of-the-art technology to create a high-tech gadget to take home, conduct laboratory experiments, and more.

- **Health Care Careers Exploration Program** is designed for deaf and hard-of-hearing students entering 10th, 11th, or 12th grade who are interested in pursuing a career in the fast-growing field of health care. The program covers a range of career options in the field along with an overview of health care issues, techniques, and technologies.

- The **Math Competition** continued its in-person competitions at four regional locations, with finalists invited to the RIT campus for a national competition. Middle school students and teams are invited to compete with other like-minded mathletes from other schools across the country. Fostering an interest in mathematics and related fields is the intent of the program.

- The inaugural edition of our **eSports** program attracted 30 high school students to the RIT/NTID campus for a national competition.

Outreach conducted multiple virtual programs in the fall and spring.

- The **Career Exploration Series** offers hour-long virtual webinars for students in grades 9-12 who are deaf and hard of hearing. Each webinar focuses on a unique STEM topic with subject matter experts from NTID leading the students through a STEM activity and discussing related careers within their fields of expertise.

- Two competitive **Tiger Science Challenges** with a specific theme were conducted: strongest bridge and tallest tower. Both challenges give students an opportunity to combine their math, science, engineering, and creative skills.

Outreach Highlights (continued)

STEM Academies

In the 2024 year, NTID's Regional STEM Center had five STEM Academies in the following states: Alabama, California, Florida, New York, and Utah.

Alabama
Alabama Institute for the Deaf and Blind (AIDB) hosted a STEM Academy at the Decatur campus. Nineteen students registered and completed the program. The students learned English, math, reading, and wellness, and participated in STEM activities.

California
NTID Regional STEM Center kicked off a pilot STEM Academy program from May 17 to 19, 2024, at California School for the Deaf, Riverside. Twenty-two students from California School for the Deaf, Riverside and University High School registered for the program. The activities were focused on robotics and chemistry, and wrapped up with a panel discussion with two mechanical engineers.

Florida
STEM Academy was held at the University of North Florida in Jacksonville, July 8 to 26, 2024. Twenty-six students registered and 25 completed the program. Students learned English, math, reading, and wellness, and participated in STEM activities. They had a presentation on drones use of the Geographic Information System.

New York
Lexington School for the Deaf's STEM Academy ran July 14 to August 3, 2024, with 24 students registered, and 21 completing the program. Students learned English, math, reading, American Sign Language, and wellness, and participated in STEM activities, including a robotics competition.

Utah
Utah School for the Deaf's Ogden campus hosted a STEM Academy, which involved learning about and building drones, robotics, and solar energy, on June 3 to 21, 2024. An average of 25 students participated in each of the three components of the STEM Academy, including coding and 3D printing.

Alumni Activities

The NTID Office of Alumni and Constituent Relations plans and implements strategies for engaging alumni and other constituents through social and professional-development events, volunteer opportunities, and other activities, both on campus and in targeted regions around the country. With counsel from, and in collaboration with, members of the NTID Alumni Association Board of Directors, Alumni and Constituent Relations works to build and maintain connections between NTID and its more than 10,000 alumni. NTID retirees and parents of current students also are included in events, activities, and engagement initiatives. AY 2023-2024 had more than 1,500 alumni and guests participating in more than 35 activities and events including alumni activities and gatherings across the country. Key events in Rochester included NTID's 55th Anniversary Reunion, a Rochester Red Wings (baseball) Deaf Culture Night, special receptions for retirees and current parents, and regular NTID Alumni Association Board of Directors meetings on campus in the fall and spring.

Pre-College Outreach

Pre-college outreach allows NTID to share its expertise to improve the education and career development of individuals who are deaf or hard of hearing via outreach initiatives designed to provide educational experiences for students in grades 6–12. NTID's pre-college outreach focuses on empowering deaf and hard-of-hearing middle school and secondary students and their parents with information to help students' long-term career success. A special focus of this effort is young women and Black or African American, Hispanic/Latino, and American Indian or Alaska Native students.

In 2024, Pre-College Outreach interacted with more than 3,881 middle school and high school students from all over the country through 10 programs. Parents, students, and teachers alike had high praise for the 2024 competitions and camps. With the success of these initiatives, RIT/NTID is continuing to make outreach a central focus through sharing 50-plus years of expertise in access services, program development, the application of technology, and ensuring that students will possess the skills and knowledge necessary to be active participants in the 21st Century American workforce.

Pre-College Outreach AY 2023-2024				
Program	Location	Total Participants	Minorities Number	Minorities Percentage
Advanced Tech Careers	RIT	15	8	53%
AMPHL Conference	Chicago	9	1	11%
Career Exploration Series	Virtual	2,619	Not collected	
Digital Arts, Film, and Animation	Virtual	10	8	80%
Explore Your Future	RIT	108	55	51%
Financial Wizards	RIT	14	8	57%
Health Care Careers Exploration	RIT	18	8	44%
Math Competition	Four regional sites and RIT	163	66	40%
Pre-ETS California	California	15	12	80%
Pre-ETS Illinois	Illinois	8	5	63%
SpiRIT Writing Contest	Virtual	14	1	7%
STEM Days & related activities	Various off campus sites	448	Not collected	
STEM Trivia	Virtual	10	2	20%
Tiger Gaming League (eSports)	Virtual and at RIT	66	20	30%
Tiger Science Challenge	Virtual	309	Not collected	
Tech Tigers	RIT	55	11	20%

Digital Arts, Film, and Animation Competition

The annual Digital Arts, Film, and Animation competition is for students in grades 9–12. The categories for the competition include Web page design, graphic media, photo illustration, and film. Two winners were selected and received cash prizes.

Math Competition

RIT/NTID's national Math Competition for middle school students challenges math skills, develops self-confidence, and rewards achievements. The intent of the competition is to foster interest in mathematics. Four regional competitions were held with 163 competitors overall. Finalists from each region, a total of 16 teams, come to RIT in the spring for a national competition where four winning teams and four individual winners receive cash prizes.

Pre-College Outreach (continued)

Tiger Gaming League

The Tiger Gaming League is a new competition introduced this past spring 2024 designed for deaf and hard-of-hearing high school students who have a strong interest in esports. A series of electrifying virtual showdowns were hosted across various gaming platforms leading up to a national championship in RIT's Cybersecurity Range Lab in May.

SpiRIT Writing Contest

The annual SpiRIT Writing Contest is for students in grades 10–12 from around the United States. Students and their teachers submit portfolios of the students' best writing. The winners received the option of a scholarship to NTID's EYF program or a cash prize.

Health Care Careers Exploration

This week-long Health Care-focused program conducted on campus at RIT in July is designed for high school deaf and hard-of-hearing students interested in exploring careers in health care. Along with opportunities to participate in social activities and experience dorm-living allowing for a supervised taste of college life, the participants:
- Receive First Aid and CPR training.
- Gain hands-on access to ultrasound technology to capture and observe a beating heart and the flow of blood.
- Observe and practice incision and drainage of wounds and abscesses.
- Learn from a panel of medical professionals.
- Interact with health and biomedical students.

Two New Summer Programs: Advanced Tech Careers and Financial Wizards

In the same vein as the Health Care Careers Exploration program, two new week-long summer programs were offered on campus at RIT in July. Both programs were designed for high school deaf and hard-of-hearing students interested in exploring careers in Technology and Finance. Both programs also offered the students opportunities to participate in social activities and experience dorm-living allowing for a supervised taste of college life.

Students attending the Advanced Tech Careers program had the opportunity to:
- Discover various high-tech careers in STEM fields such as mechanical and electrical engineering, computer science and programming, and science and technology innovation.
- Use state-of-the-art lab equipment to conduct experiments and solve challenges.
- Build a tech gadget to take home.
- Build a DIY smart home device.
- Design a game through interactive game programming.
- Visit RIT's Cybersecurity Range Lab and learn about careers and opportunities in cybersecurity.

Students attending the Financial Wizards program had the opportunity to:
- Explore diverse careers in finance and administration, including roles such as corporate finance officer, accountant, financial analyst, and investment banker.
- Use state-of-the-art lab equipment to engage in a stock market app and solve fun challenges.
- Generate an account with pretend funds and play in the Stock Market Game™.
- Visit RIT's Stock Market lab.

Pre-College Outreach (continued)

Tech Tigers

This week-long, technology-focused program conducted on campus at RIT is designed for middle school deaf and hard-of-hearing students. Held in July, Tech Tigers gives participating students an opportunity to build their own computer and take it home with them at the end of the week. They also attend presentations on cybersecurity and the internet of things (IOT), and have the opportunity to write small blocks of code for controlling a few IOT devices. While on campus, they participate in social activities and experience dorm-living, giving them a supervised taste of college life.

Career Exploration Series

The Career Exploration Series is a group of exciting hands-on hour-long virtual webinars for deaf and hard-of-hearing students in grades 9-12. Each webinar focuses on unique topics that relate to career options for their future and includes a fun activity that allows the students to apply what they learned. This program is a hold-over innovation from the COVID years that has generated a reputation of its own, and now is a part of Outreach's permanent programming portfolio with an average of 300+ students attending each webinar.

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Date	Topic	Students
5-Oct-23	Career Exploration Series – Neuroscience: Your Amazing Brain	255
30-Nov-23	Engineering Explorations: Unveiling Innovations – Part 1	304
30-Nov-23	Engineering Explorations: Unveiling Innovations – Part 2	288
14-Dec-23	Engineering Explorations: Unveiling Innovations – Part 3	301
25-Jan-24	ASL Science Safari: Navigating the World of Scientific Signs	302
22-Feb-24	Why Bridges Use I-Beams, but Corn Stalks Are Round	311
19-Mar-24	Special Edition: Solar Eclipse	184
21-Mar-24	Animation/Motion Graphics through Illustration and Technology	329
11-Apr-24	Blood and Rh Factor Typing	345

Tiger Science Challenge

The science challenge program offers middle school students opportunities to test their science knowledge and skills and their patience, and requires some hard work to solve a challenging task. This year's challenges included creating the strongest bridge using popsicle sticks and the tallest or most creative tower using dry spaghetti and marshmallows.

Pre-College Outreach (continued)

STEM Days

The STEM Days and related programs bring exciting day-long, hands-on STEM activities and programs for middle school and high school students to experience a variety of STEM topics and activities usually after school or during the weekend. Each STEM topic includes an overview of career options for that subject area and fun activities that allows the students to experience the roles one might perform in those careers.

Date	Event Name	Students
October 11-12, 2023	Lexington School for the Deaf	55
November 3-4, 2023	ACT Prep/STEM Activity	12
November 10, 2023	RIT/NTID: Overview of Statistics @ Jr. NAD Conference	78
November 11, 2023	Deaf Culture Day @ Rochester Museum & Science Center (RMSC)	10
January 20, 2024	STEM Day/Steps to Success	51
April 16, 2024	Idaho School for the Deaf	51
April 17-18, 2024	Jean Massieu School for the Deaf	90
May 29, 2024	Youth Canada Tournament of the Deaf	78
June 16-21, 2024	California STEM Week	15
June 23-28, 2024	Illinois STEM Week	8

Explore Your Future

Explore Your Future (EYF) is a week-long career exploration and evaluation program conducted at NTID each summer for deaf and hard-of-hearing students about to enter their junior or senior year of high school. It is one of the college's most successful outreach programs. The program provides high school students with the opportunity to learn about themselves and their educational and life/career choices. It incorporates the framework that people have differing interests in six areas: Realistic, Investigative (Computer), Artistic, Social, Enterprising, and Investigative (Science). Students participate in hands-on career exploration classes and personal awareness instruction. Myriad social activities and dorm-living opportunities give participants a taste of college life. A total of 7,706 students have participated in EYF over the past 40 years. Twenty-three percent of summer 2023 participants subsequently enrolled at NTID. Two sessions were offered in summer 2024. This year's participants came from 23 states and the District of Columbia.

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Number of Participants	136	137	117	147	147
Percentage of Minorities	47%	39%	54%	60%	61%
Percentage Enrolling at NTID*	26%	15%	26%	23%	N/A**

Explore Your Future (EYF) students learn about healthcare careers, including ultrasound technician/sonographer.

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* Since EYF participants are juniors and seniors, the percentage of an EYF cohort that enrolls at NTID is recalculated each year to capture additional enrollments.

** Students from EYF 2024 currently are in the process of applying to NTID.

Explore Your Future – Enrollment by Location

Summer 2024 EYF students represented 23 states
plus the District of Columbia for a total of
108 students.

Home State	Number in EYF Summer 2024
Arizona	1
California	24
Connecticut	1
Florida	7
Illinois	12
Indiana	2
Kentucky	2
Maine	1
Maryland	9
Massachusetts	6
Minnesota	4
Missouri	1
New Hampshire	1
New Jersey	7
New York	9
Ohio	1
Pennsylvania	6
South Dakota	1
Tennessee	2
Texas	5
Virginia	1
Washington	2
Wisconsin	2
Washington, D.C.	1
Total	**108**

NTID Regional STEM Center

The mission of the NTID Regional STEM Center (NRSC) is to promote exposure to STEM for middle and high school deaf and hard-of-hearing students in Science, Technology, Engineering, and Mathematics (STEM) fields. The ultimate goal is to increase post-secondary participation for deaf and hard-of-hearing students in STEM fields, resulting in substantial employment. Congress authorized this project to establish a formal regional partnership with at least one organization in the southeastern United States to expand the geographic reach of activities and services supported by NTID consistent with NTID's mission and strategic plan. NTID has contracted with Alabama Institute for Deaf and Blind (AIDB) since November 2016 to serve as the NTID Regional STEM Center in the Southeast (NRSC). The region served by this partnership includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas. Additional programming can be provided outside the 12-state region on a case-by-case basis.

The NRSC targets five specific groups:

Students and Families
Programs and activities offered to deaf and hard-of-hearing middle and high school students include, but are not limited to: robotics tournaments, drone activities, cybersecurity activities, STEM days and fairs, ACT Testing Strategies training, biology and biotech camps, Mechatronic Engineering Leadership in Deafness programs, STEM in agriculture programs, Career Exploration webinars, Explore Your Future summer programs, FutureQuest workshops, Tech Tigers, and Health Care Careers Exploration programs. NTID's annual Math Competition also targets deaf and hard-of-hearing middle school students and was expanded to regional competitions, leading up to a national competition at NTID in March 2024. There also is a new and growing focus on student transition programming, supported by our Summer Transition Programs on the RIT/NTID campus and Alabama Institute for Deaf and Blind (in combination with a STEM academy at AIDB). Scholarships are offered for participation in programs and activities, as well as sponsorships for external STEM programs and activities. Sunshine 2.0, NTID's traveling theater troupe, has toured throughout the country, offering STEM-related performances and workshops.

Teachers
NRSC provides support for state, local, and regional conferences on education of deaf and hard-of-hearing secondary and postsecondary students, with an emphasis on STEM topics. In addition, NRSC offers scholarships for undergraduate students in STEM programs at RIT/NTID, as well as for students in NTID's American Sign Language and Interpreting Education program and the Master of Science in Secondary Education of Students Who are Deaf and Hard-of-Hearing program who demonstrate interest in working in STEM fields. Priority is placed on BIPOC students in the scholarship selection process. NRSC also provides support for NTID's expanded national Project Fast Forward dual-credit program for high schools serving deaf and hard-of-hearing students.

Vocational Rehabilitation (VR) Personnel
NRSC staff provide training, consultations, and visits to VR personnel, and a full-time VR specialist was hired to do outreach and training. A new advisory board was established and held the first meeting in April 2023. More advisory board meetings and additional members will be added with a task force meeting scheduled for November 2024.

Sign Language Interpreters
NTID employs two part-time STEM interpreter trainers who organize and provide professional training activities, exchange programs, and mentorship for educational trainers on STEM topics.

Employers
NTID's Co-op and Career Center (NCCC) conducts training for employers, ranging from private corporations to non-profits, and visits job sites where students work. The team also attends various conferences, educating leaders about hiring and working with deaf and hard-of-hearing employees and how to make workplaces more accessible. In collaboration with Gallaudet University, the National Association of the Deaf, and Communication Service for the Deaf, NCCC staff also offered a series of virtual seminars on employment-related topics. A national deaf employment summit was virtually hosted October 2024.

Project Fast Forward

Project Fast Forward is part of the NTID Regional STEM Center. The program is primarily funded by NTID's Regional STEM Center for all STEM-related courses. Funding for non-STEM-related courses is derived from NTID operating funds.

The goal of Project Fast Forward is to help deaf and hard-of-hearing high school students across the country get a jump on a college degree by offering dual-credit college courses at no cost to the students.

School Partners. During AY 2023-2024, 71 dual-credit course sections were offered at 28 schools for the deaf and programs for deaf and hard-of-hearing students. Current Project Fast Forward school partners are listed below:

1. Alabama Institute for Deaf and Blind, Talladega, Alabama
2. American School for the Deaf, West Hartford, Connecticut
3. Arizona State Schools for the Deaf and Blind, Tucson, Arizona
4. Arkansas School for the Deaf, Little Rock, Arkansas
5. Atlanta Area School for the Deaf, Atlanta, Georgia
6. California School for the Deaf, Fremont, California
7. California School for the Deaf, Riverside, California
8. Cleary School for the Deaf, Nesconset, New York
9. Cypress Ridge High School, Houston, Texas
10. Delaware School for the Deaf, Newark, Delaware
11. Eastern North Carolina School for the Deaf, Wilson, North Carolina
12. Florida School for the Deaf and the Blind, St. Augustine, Florida
13. Georgia School for the Deaf, Cave Spring, Georgia
14. Hinsdale South High School, Hinsdale, Illinois
15. Horace Mann School for the Deaf, Boston, Massachusetts
16. Idaho School for the Deaf, Gooding, Idaho
17. Illinois School for the Deaf, Jacksonville, Illinois
18. Indiana School for the Deaf, Indianapolis, Indiana
19. Kansas School for the Deaf, Olathe, Kansas
20. The Learning Center, Framingham, Massachusetts
21. Lemont High School, Lemont, Illinois
22. Lexington School for the Deaf, Jackson Heights, Queens, New York
23. Louisiana School for the Deaf, Baton Rouge, Louisiana
24. Maryland School for the Deaf, Frederick, Maryland
25. McNeil High School, Round Rock, Texas
26. Metro Deaf School, St. Paul, Minnesota
27. Mill Neck Manor School for the Deaf, Mill Neck, New York
28. Minnesota State Academy for the Deaf, Faribault, Minnesota
29. Model Secondary School for the Deaf, Washington, DC
30. New Mexico School for the Deaf, Santa Fe, New Mexico
31. New York School for the Deaf, White Plains, New York
32. North Carolina School for the Deaf, Morganton, North Carolina
33. Northland High School, Columbus, Ohio
34. Ohio School for the Deaf, Columbus, Ohio
35. Oklahoma School for the Deaf, Sulphur, Oklahoma
36. Pennsylvania School for the Deaf, Philadelphia, Pennsylvania
37. Phoenix Day School for the Deaf, Phoenix, Arizona
38. Plano Senior High School, Plano, Texas
39. Rhode Island School for the Deaf, Providence, Rhode Island
40. Rochester School for the Deaf, Rochester, New York
41. Rocky Mountain Deaf School, Denver, Colorado
42. St. Mary's School for the Deaf, Buffalo, New York
43. Tennessee School for the Deaf, Knoxville, Tennessee
44. Texas School for the Deaf, Austin, Texas
45. Tucson Magnet High School, Tucson, Arizona

46. University High School, Irvine, California
47. Utah Schools for the Deaf and the Blind, Ogden, Utah
48. Vines High School, Plano, Texas
49. Washington School for the Deaf, Vancouver, Washington
50. Western Pennsylvania School for the Deaf, Pittsburgh, Pennsylvania
51. Willie Ross School for the Deaf, Longmeadow, Massachusetts
52. Wisconsin School for the Deaf, Delavan, Wisconsin

Dual-Credit Courses. The following courses were developed for high schools to teach and earn their students RIT/NTID college credit.

1. *Computer Applications:* An introduction to word processing, spreadsheet, presentation, and database applications.
2. *Web Development I*: An introduction to Web page development, including XHTML and Web graphics.
3. *PC Hardware I*: An introduction to the fundamental hardware concepts of personal computer (PC) systems, including their structure and components.
4. *Introduction to Programming:* An introduction to the fundamental concepts and terminology of computer programming.
5. *Visual Idea Development:* An introduction to strategies for developing concepts and organization of thought processes, as well as systems to formulate solutions to design problems utilizing different mediums.
6. *Page Layout I:* An introduction to page layout applications to produce pages and documents to given specifications.
7. *Raster/Vector Graphics:* Introduces the skills needed for the successful production and manipulation of raster and vector images using image creation and production software.
8. *Blueprint Reading:* An introduction to the skills necessary to read and interpret fundamental engineering drawings of details, subassemblies, and assemblies.
9. *Engineering Graphics:* Introduces the skills needed to create professional 2D mechanical, architectural, and civil drawings using AutoCAD software.
10. *CAD Applications:* Introduces skills using computer-aided drafting (CAD) as a tool to generate 2D graphics and 3D solid models.
11. *Mathematics in Society:* An exploration of mathematical thinking and procedures including applications to real world situations and using problem-solving skills.
12. *Processes of Science: Forensics:* An introduction to science processes using the content of forensics as a vehicle to establish an appreciation of the scientific method, critical thinking, and problem solving.
13. *Processes of Science: Biological Studies:* An introduction to science processes using biology content as a vehicle to establish an appreciation of the scientific method, critical thinking, and problem solving.
14. *Processes of Science: Environmental Studies:* An introduction to science processes using the content of environmental studies as a vehicle to establish an appreciation of the scientific method, critical thinking, and problem solving.
15. *Personal Finance:* An introduction to basic financial literacy for students to develop sound financial management of their personal income, as well as an understanding of the economic events that can influence their financial well-being and society as a whole.
16. *Fundamentals of Spreadsheet Applications:* An introduction to developing a strong foundation in the fundamentals concepts of developing a spreadsheet.
17. *Orientation to Business:* An introduction to a broad overview of the form and structure of multinational organizations and how businesses operate.
18. *Critical Reading and Writing:* Through inquiry-based assignment sequences, students will improve their writing by developing academic research and literacy practices that will be further strengthened in First-Year Writing.
19. *Introduction to Performing Arts:* Examines the characteristics and elements of theatre and the performing arts, emphasizing the principles and conventions that guided theatre productions through history with particular attention to the emergence of Deaf and multicultural theatre.

Project Fast Forward (continued)

20. *Introduction to Stagecraft*: An introduction to the technical and design processes of theatre, including scenery, costume, lighting, make-up, and prop craft.
21. *Basic 3D Modeling*: An introduction to the representation of form in three-dimensional space using 3D software focusing on the development of visual and verbal vocabulary as a means of exploring, developing, and understanding 3D modeling techniques.
22. *Introduction to Community Leadership and Development*: A basic introduction to inclusive leadership and community development by focusing on what it means to be a good leader who facilitates community development. Emphasis is on the practice of leadership.
23. *Developmental Human Anatomy & Physiology*: Introduces basic human development and maturation from a multidisciplinary perspective. The fields of human anatomy and physiology are merged with developmental psychology for the purpose of examining the human life cycle from a holistic perspective.

Courses Taught and Credit Earned. During AY 2023-2024, 71 course sections were taught at 28 partner high schools, with 264 unique deaf and hard-of-hearing high school students enrolled in those courses, and 52 students enrolled in more than one course for dual credit, bringing the total to 328 registrations. Of these students, 242 students, or 74% of the total, successfully completed their dual-credit course and earned three RIT credits.

The following is the total number of Project Fast Forward dual-credit courses taught and students served through Project Fast Forward, from Fall 2007 to Spring 2024:

- o 509 dual-credit course sections were taught by 196 teachers in their high schools.
- o 2,974 registrations were recorded in Project Fast Forward courses.
- o 2,149 unique deaf and hard-of-hearing students participated in the program.
- o 813 deaf and hard-of-hearing students took more than one course.
- o From Fall 2007 to Spring 2023, the passing grade for dual-credit courses was 73% (C) or better. Starting in the 2023-24 academic year, the minimum passing grade was adjusted to 60% (D) or better.
  - Between Fall 2007 and Spring 2023, 1,647 students (63%) of those enrolled in dual-credit courses achieved passing grades under the previous standard.
  - For the academic year 2023-24, with the updated passing requirement, 241 students (74%) of those enrolled in dual-credit courses have achieved passing grades.
- o 5,664 RIT/NTID credits were awarded to deaf and hard-of-hearing students.

In AY 2024-2025, 62 dual-credit participants matriculated at RIT/NTID compared to 65 students during AY 2023-2024.

Professional Development. Offered to high school teachers from partnering high schools. Teachers receive technical training on course content, teaching methodologies, and improving access for deaf and hard-of-hearing students in mainstream classrooms. Both teachers and counselors also receive training on selected STEM career opportunities for deaf and hard-of-hearing individuals and on the dual-credit program.

In July and August 2024, training was offered both in person and virtually to 26 new Project Fast Forward high school teachers and 17 returning Project Fast Forward high school teachers. There were three new high school partners present at the training. The training for high school counselors was offered for the second consecutive year following the pandemic. Nine guidance counselors were in attendance. During the 17 summers of Project Fast Forward, between 2007 and 2023, the following numbers of teachers and counselors have participated in summer professional development:

- o 221 teachers from 53 partner schools have attended summer professional development to prepare to teach dual-credit courses in their high schools, with many teachers returning to NTID to learn content for a second and third course, for a total of 326 teacher trainings.
- o 59 guidance counselors attended summer professional development activities to work with students taking dual-credit courses in their high schools.

Project Fast Forward (continued)

Project Fast Forward Award. In January 2020, an award program was established to support under-resourced high schools serving predominantly BIPOC students. Schools can apply for up to $10,000 per semester to cover instructional materials and associated software for dual-credit courses. Beginning in July 2024, the award amount has been revised to $5,000 per year for schools offering a RIT/NTID dual-credit course for the first time. From 2020 to Spring 2024, 34 awards have been processed totaling $166,460.37. Pennsylvania School for the Deaf reported, "Our students were appreciative of being able to perform experiments that included dissections for the first time. It made them realize how much more knowledge there was to gain in the field of STEM." Marie Philip School at the Learning Center for the Deaf created a thank you VLOG stating, "The new technology has been a real motivator for our students and they are more engaged in their learning." Washington School for the Deaf shared, "This support helped to enrich our students' education, which will create unseen impacts that will last for a lifetime."

Staffing Updates. On June 17, 2024, Brittany Comegna left her position as Coordinator of Outreach and Special Projects to start up her own business. As of this writing, interviews are being conducted for her replacement.
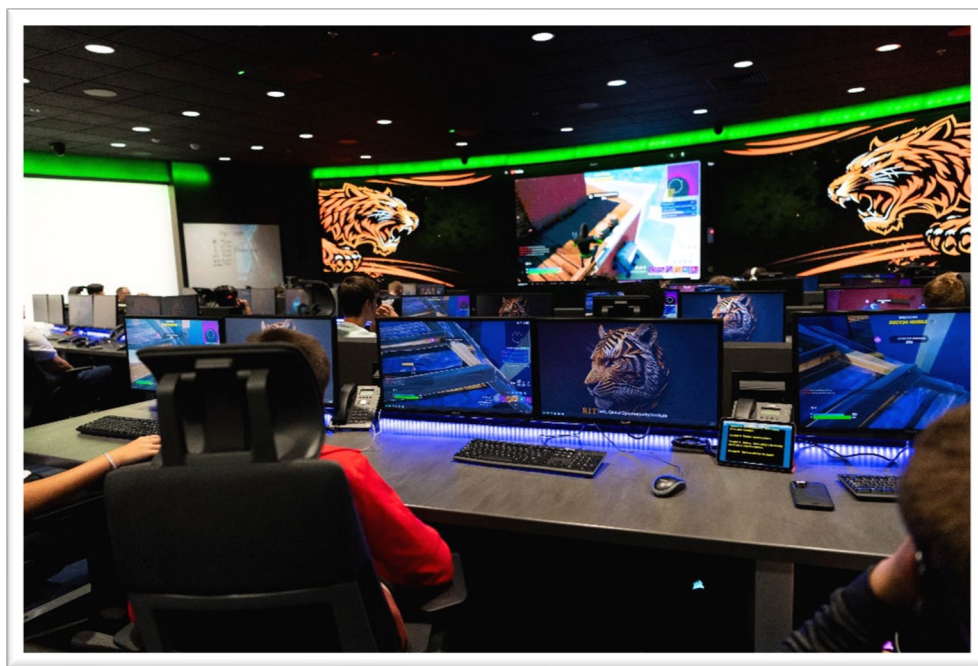
NTID Outreach programs, like the new Tiger Gaming League, pictured here at RIT's ESL Global Cybersecurity Institute, help prepare deaf and hard-of-hearing middle and high school students for post-secondary STEM education and careers.

DeafTEC

The National Science Foundation (NSF) Advanced Technological Education (ATE) National Center of Excellence grant, *DeafTEC: Technological Education Center for Deaf and Hard-of-Hearing Students,* was awarded in August 2011. A four-year renewal of the award was received in August 2015. As the largest NSF award in RIT's history, DeafTEC established the first ATE center to support individuals who are deaf or hard of hearing. In August 2019, a three-year DeafTEC Resource Center was awarded to RIT to continue and disseminate the work of DeafTEC.

The goal of DeafTEC is to increase the number of deaf and hard-of-hearing individuals in highly skilled technician jobs in which there continues to be underrepresentation and underutilization of such individuals in the workplace. The DeafTEC Resource Center provides deaf and hard-of-hearing students, as well as their teachers, counselors, employers, and co-workers, with the resources that will help those individuals succeed, both in the classroom and on the job.

DeafTEC Resource Center

The DeafTEC Resource Center builds on and utilizes the exemplary materials and network that have been developed as part of the DeafTEC National Center. The DeafTEC Resource Center: (1) leverages partnerships to broaden professional development opportunities onsite and online for high school teachers, community college faculty, and employers to improve access to learning and technician employment for deaf and hard-of-hearing students; (2) expands, enhances, and broadly distributes DeafTEC's innovative online resources and curricula available through its websites that serve as an information clearinghouse related to technical education and technician careers for deaf and hard-of-hearing students, and a national resource for teaching student veterans with hearing loss; and (3) collaborates and provides mentoring for prospective principal investigators and current ATE projects and centers on creating inclusive environments for deaf and hard-of-hearing students and military veteran students with hearing loss. Some of the DeafTEC highlights from this year are given below.

In May 2023, DeafTEC was awarded a three-year renewal grant for the DeafTEC Resource Center (grant# 2301149) for $1,649,965 that will run from August 1, 2023 to July 31, 2026.

Deaf Kids Code Train-the-Trainer Workshop

DeafTEC in partnership with Deaf Kids Code and the NTID Regional STEM Center offered train-the trainer professional development for 12 high school teachers from seven schools and two staff from the NTID Outreach Consortium. This two-and-a-half-day workshop was held June 25-27, 2024, on the RIT campus and prepared teachers to offer the Deaf Kids Code curriculum at their schools. The workshop was led by Deaf Kids Code founder, Shireen Hafeez, and two deaf faculty members from the NTID Department of Information and Computing Studies – Brian Trager, Co-PI and department chair, and Kemoy Campbell.

Teachers were from the following schools: Illinois School for the Deaf (2), Utah School for the Deaf (1), Center for Deaf and Hard of Hearing Youth Washington School for the Deaf (2), Cypress-Fairbanks Independent School District (2), Ohio School for the Deaf (1), Arizona School for the Deaf (2) and Rhode Island School for the Deaf (2). Through hands-on activities using various low-cost learning kits and software tools, teachers were introduced to fundamental programming concepts using the Blocky app with MakeWonder DASH Robots and MIT Scratch, designed projects with Makey Makey Invention Kits to teach other STEM concepts, and practiced coding and game development with BitsBox. The agenda was flexible, allowing teachers to direct the instructions to specific areas of interest. After each hands-on experimentation, teachers shared their projects and take aways and discussed possible curriculum applications and ideas for instructions. A virtual panel of three deaf computer professionals was conducted. The panelists discussed their career pathways and strategies a teacher can use in the classroom to motivate and spark interest in a student.

Math Observations in Deaf Education (MODE) Webinars

MODE is a webinar series hosted by Dr. Dawn Kidd, a middle school math teacher at the Texas School for the Deaf. Dr. Kidd invites different guests each month to discuss a particular current topic in math education in ASL. The webinar is presented in an informal talk show format, complete with visual aids, ideas for teaching, etc. Voice interpreting and captioning are provided for each webinar. The webinar

series, which began in March 2021, has presented nine webinars totaling 2,616 registrants and 1,467 attendees. The response to these workshops is significant, given the audience of math educators of the deaf is quite small. Through this webinar series, DeafTEC is providing this community with much-needed resources and conversations aimed at reducing the achievement gap of deaf and hard-of-hearing students in mathematics.

MODE #10 Using AI to Teach Mathematics was offered October 28, 2023, with 293 people registered and 128 (57%) attending. During this webinar, Brian Trager and Kemoy Campbell from NTID's Information and Computing Studies explained AI, discussed the benefits of using AI to teach math, and demonstrated two AI platforms, ChatGPT and Bing.

MODE #11 Ideas for Teaching Mathematical Word Problems was offered April 26, 2024, with 293 people registered and 167 (57%) attending. During this webinar, math teacher Grace McCoy from the Michigan School for the Deaf and host Dawn Kidd discussed using two strategies for teaching word problem-solving to deaf and hard-of-hearing students: the three read strategy and using a graphic organizer. McCoy was a participant in the *Teaching Strategies for Deaf and Hard-of-Hearing Student Engagement in Mathematics* sessions (see below).

ATE Community Webinars
DeafTEC is partnering with CAST and the NSF ATE projects, ATE Central and AccessATE, to offer a new series of webinars related to improving access to learning for students with disabilities in technician education programs. Theresa Johnson and Donna Lange met with Sam Johnston, chief postsecondary and workforce development officer at CAST, and Rachael Bower, ATE Central and AccessATE PI, to identify webinar topics. To date, we have offered two webinars.

How to Use Otter.ai and Glean for Notetaking and Transcription was offered March 7, 2024, with 44 people registered and 28 (64%) attending. The webinar was hosted by Mike Sauter, alternate media specialist at Saddleback College. During the webinar, Sauter demonstrated how to use Otter.ai to transcribe meetings in real-time, record audio, capture slides, extract action items, and generate an AI meeting summary, and how to use the features of Glean to record classes, add notes, and combine transcripts, slides, and other visual supports in one easy-to-use workspace.

Empowering Inclusion: Navigating Bookshare and DCMP for Student Success was offered on April 4, 2024, from 2:00-3:00 EDT, 42 people registered with 25 (60%) attending. Theresa Johnson hosted the webinar with two guests – Cindy Camp, marketing and communications specialist for Described and Captioned Media Program (DCMP) and Luis Perez, disability and inclusion lead for CAST. Camp gave an overview of DCMP, the nation's leading source for accessible educational videos and demonstrated some new features just released. Perez explained and demonstrated from a user perspective how to use Bookshare, the county's largest accessible online library for people with reading barriers.

Teaching Strategies for Deaf and Hard-of-Hearing Student Engagement in Mathematics Sessions
Eight 1.5-hour virtual sessions were held to discuss the book "Building Thinking Classrooms in Mathematics" by Peter Liljedahl with middle- and high-school teachers of the deaf. This professional development event was an offshoot of the April 2023 MODE webinar in which guest Chong Min Lee, a mathematics teacher at Metro School for the Deaf, discussed how she incorporates ideas from the book into her classroom practices.

During each 90-minute session, two chapters of the book were discussed. The workshop leaders, Dawn Kidd and Chong Min Lee, used breakout rooms to allow for smaller groups of teachers to discuss challenges they faced in the classroom and how to apply strategies from the book.

Author Peter Liljedahl joined for 40 minutes during the January 3 session. He was very interested in learning how teachers are adapting his strategies to the deaf classroom.

Employer Outreach

NTID initiates and delivers consultation, training, follow-up, and other support services to employers. Through these services, employers become aware of the needs of deaf and hard-of-hearing people for employment and, in partnership with NTID, facilitate graduates entering the workforce and continuing their career development.

Employer Training and Educational Programs
The NTID Co-op and Career Center (NCCC) conducted and presented seven programs, reaching 994 human resources professionals and company representatives.

NTID Information Sessions
Eight employers engaged with 211 students and alumni, explaining their mission areas, workplace culture, opportunities growth, and the roles they typically hire for, as well as the desired skills.

NTID Career Fair
The career fair, held in October 2023, attracted 34 employers and 237 students and alumni.

Outreach to Employers
- Exhibited, networked, and participated in six national conferences:
  - Southeast Regional Institute on Deafness in Charlotte, North Carolina – October 2023
  - SHRM Diversity and Inclusion in Savannah, Georgia – November 2023
  - CSUN Assistive Technology in Anaheim, California – March 2024
  - SHRM Talent in Las Vegas, Nevada – April 2024
  - National Association of Colleges and Employers in Phoenix, Arizona – June 2024
  - Disability:IN in Las Vegas, Nevada – July 2024

- Served on a panel:
  - "Demystifying Disability: Working Towards a More Inclusive Workplace" at Initiative's NYC Office to 123 participants – December 2023

Employer Partnerships/Events
- The NCCC developed 16 new employer partnerships.
- The NCCC team attended seven events hosted by various employers.
- Two NCCC representatives traveled to Washington D.C. to participate in the D.C. Metro Disability Inclusion Celebration at Deloitte.

NCCC Marketing Highlights
- Developed news releases and articles to promote employer participation in the NTID Information Sessions and NTID Career Fair.
- Developed new program marketing pieces, and reviewed NCCC brochure and NCCC website (rit.edu/ntid/nccc) to ensure content was up to date.
- Posted current relevant employment information on NCCC Facebook, LinkedIn and Instagram.
- Featured student and recent graduate success stories on the NCCC website at least once a month.
- Advertised and produced a short video to encourage our students to apply for the Disability: IN's NextGen Leaders program. It is a six-month mentorship and career-development program for college students and recent graduates, including veterans, with disabilities.
- Produced six short video clips for the Career Fair.

Faculty and Staff

NTID's faculty and staff average 11.8 years of service at NTID.

Faculty and Staff Highlights

Attracting and retaining the most capable and dedicated faculty and staff in order to provide an exceptional learning environment for deaf and hard-of-hearing students is central to fulfilling NTID's mission and purpose. NTID's highly qualified faculty and staff bring to the institute a wide variety of experiences, skills, and backgrounds. Some are veteran educators with many years of higher education teaching experience, while others bring to the NTID classroom a wealth of hands-on knowledge gained from working in business and industry. Among the latter group are alumni who, after gaining significant work experience away from NTID, have returned to their alma mater to share the expertise they have learned on the job with a new generation of students.

In 1987, NTID employed 687 faculty and staff. As of fall 2024, NTID employed 590* faculty and staff, up from 578 in fall 2023.

Number of NTID Employees by Year

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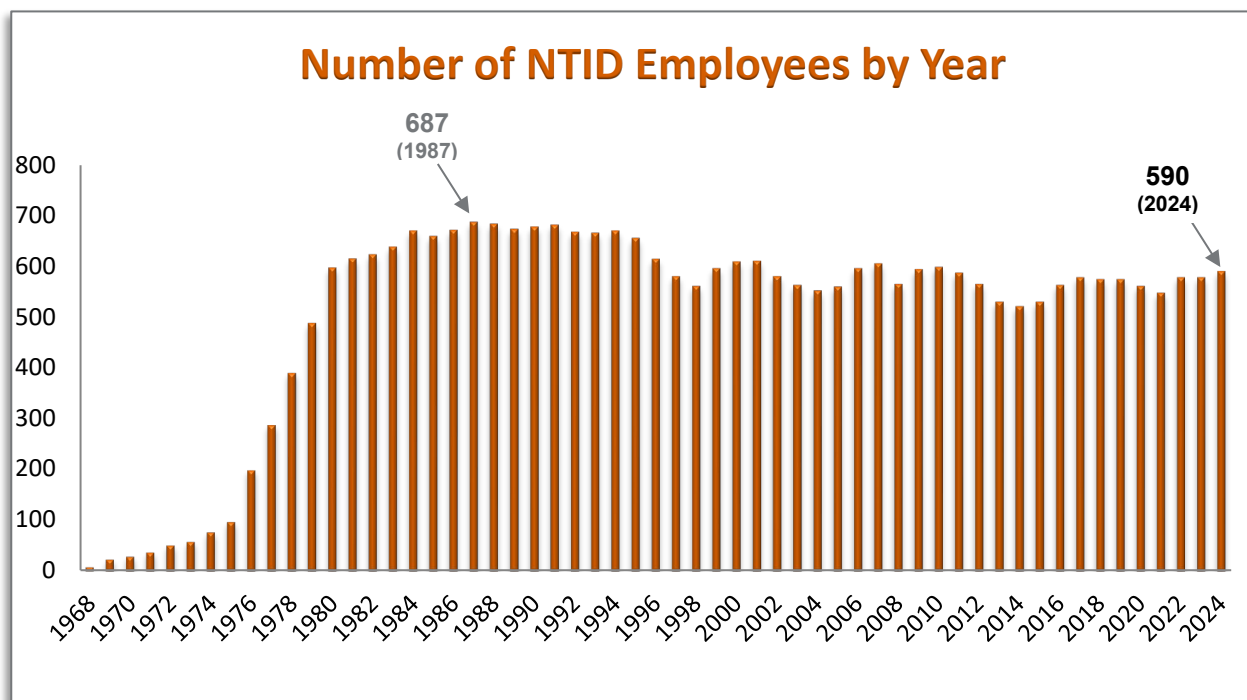
*   Of the 590 employees, 549.88 are covered by NTID's operating funds.

Average Salary: Faculty and Staff

RIT endeavors to maintain faculty salaries that are on par with the colleges and universities with which it competes. Similarly, RIT provides staff salaries that are competitive with other local and regional colleges and businesses. Annual pay increments for NTID faculty and staff are established by RIT.

	Total Number in Position	Average Salary* FY 2024
Faculty		
Professor	12	$110,411
Associate Professor	31	$102,676
Assistant Professor	22	$76,470
Principal/Senior Lecturer	40	$76,890
Lecturer	43	$66,208
Subtotal Faculty	**148**	**$81,862**
Staff		
Exempt Staff	146	$77,457
Non-Exempt Staff	296	$56,989
Subtotal Staff	**442**	**$63,750**
Total	**590****	**$68,293**

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* Average salary calculations are based on a standard full-time schedule for each faculty/staff category of 40 hours per week, 52 weeks per year. Individual variances are adjusted to the same scale.

** Of the 590 employees, 549.88 are covered by NTID's operating funds.

Tenure-Track Positions and Faculty Rank

In FY 2024, senior-level faculty members (professor and associate professor) comprised 74% of all ranked tenure-track faculty as compared to 47% in FY 1985. Of the 54 tenure-track positions, 87% are tenured.

Rank	Number of Tenure-Track Positions*					FY 2024 Faculty with Tenure	
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Number	Percent
Professor	15	16	14	13	12	12	100%
Associate Professor	35	30	30	31	28	27	96%
Assistant Professor	18	17	14	13	14	4	29%
Total Positions	**68**	**63**	**58**	**57**	**54**	**47**	**87%**

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* Includes ranked administrators.

Degree Levels of Tenured and Tenure-Track Faculty

Faculty members join NTID with a wide variety of backgrounds, including those with substantial experience in the private sector. In FY 2024, 94% of tenure-track faculty members held graduate degrees.

FY 2024 Highest Degree Level Achieved Tenure and Tenure-Track Faculty*		
	Number	Percent
Doctorate	31	57%
Master's	20	37%
Bachelor's	3	6%
Total	**54**	**100%**

* Includes ranked administrators.

Length of Service and Retirement Status of NTID Faculty and Staff*

Faculty and staff average 11.8 years of service
at NTID.

FY 2024

	Percent Full Time	Average Length of Service	Currently in Retirement Transition
Professor	100%	24.7	1
Associate Professor	97%	22.1	0
Assistant Professor	100%	10.7	1
Principal/Senior Lecturer	100%	16.3	1
Lecturer	98%	5.4	0
Exempt Staff	100%	12.1	0
Technical/Clerical	96%	9.3	0
Interpreter	88%	12.4	1
Real-Time Captionist	97%	8.3	1

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*   Data not available for all faculty and staff.

Faculty and Staff New Hires

The distribution of new hires by category is shown below.

| | New Hires | | | | |
Category:	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Faculty	10	5	13	6	9
Exempt Staff	4	9	22	19	8
Non-Exempt Staff*	21	36	70	52	43
Total	**35**	**50**	**105**	**77**	**60**

NTID's College Bowl student team, coached by James Munro, far left, interim director of operations, Access Services, and Christopher Kurz, far right, professor, Department of Deaf Education, won first place in August 2024, the seventh win for NTID. Students pictured left to right are: Coach Munro; Ryker D'Angelo, an English major from St. Augustine, Florida; Emma Kane, a public policy major from Rochester, New York; Chang-May Tan, a biomedical sciences major from Fremont, California; Coffey King, an accounting major from Capitol Heights, Maryland; and Coach Kurz.

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* Includes technical and clerical positions, real-time captionists, and interpreters.
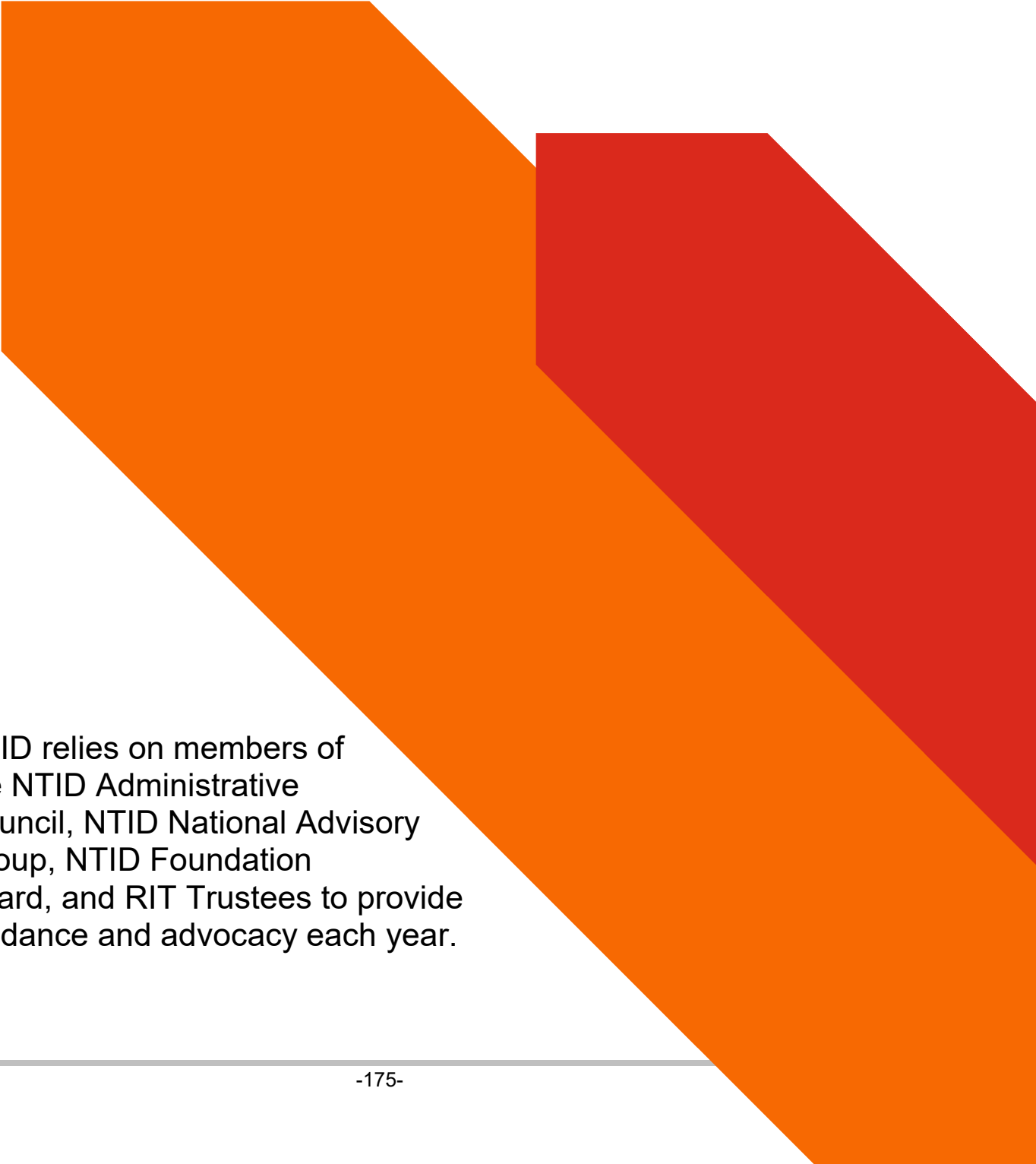
Faculty and Staff

Faculty and Staff Terminations

The faculty and staff turnover rate, 11.0%, is lower than last year. Retirements of current faculty and staff are expected to rise as the employee base ages.

Category:	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024 Percent	FY 2024 Number
Faculty	8.6%	9.7%	11.8%	6.3%	6.8%	10
Exempt Staff	6.4%	15.1%	10.6%	8.3%	6.2%	9
Non-Exempt Staff*	14.7%	10.9%	14.6%	18.5%	15.5%	46
Total	**11.2%**	**11.5%**	**13.0%**	**13.1%**	**11.0%**	**65**

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* Includes technical and clerical positions, real-time captionists, and interpreters.

RIT/NTID Leadership

NTID relies on members of the NTID Administrative Council, NTID National Advisory Group, NTID Foundation Board, and RIT Trustees to provide guidance and advocacy each year.

NTID Administrative Council*

Dr. Gerard J. Buckley '78
President, NTID;
Vice President and
Dean, RIT

Dr. Alesia Allen '04
Assistant Vice President for
NTID Diversity and Inclusion

Gary Behm '78, '81
Associate Vice President for
Academic Affairs

Dr. Pamela Carmichael '04
Assistant Vice President of
Communications, Marketing
and Multimedia Services

Bryan Hensel
Executive Director, Office of
External Affairs

Bernard Hurwitz, J.D.
Associate Vice President for
NTID Administration

Dr. Jess La Sala '98, '02
Associate Dean for
Academic Administration

Dr. Matthew Lynn
Associate Dean for
Curricular Affairs

Dr. Mary Karol Matchett '88
Assistant Vice President
for Student and
Academic Services

Charles McFadden
Executive Director,
Pre-College Programs

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* The following individuals also served on the NTID Administrative Council in FY 2024: Dr. Matt Dye, Associate Dean of Research, Dr. Joseph Hill, Assistant Dean for ALANA Faculty Recruitment and Retention, and Dr. Denise Kavin, Assistant Dean and Executive Director of NTID Outreach, Placement and Special Projects.

NTID Administrative Council (continued)

Nancy Popolizio
Executive Assistant to the NTID
President and Office Manager

Rick Postl
Director of NTID Admissions

Dr. Thomastine Sarchet-Maher '03, '09
Assistant Professor, MSSE

Erwin Smith
Assistant Vice President for
Information Technology and
College Operations

Kate Sweeney
Assistant Vice President for
NTID Finance and Budget

Brittany Taylor
Director of NTID
Access Services

NTID National Advisory Group

The National Advisory Group advises the NTID president/RIT vice president and dean in developing and carrying out policies governing the operation and direction of the institute. The National Advisory Group comprises professionals concerned with the education of deaf and hard-of-hearing students, professionals concerned with postsecondary education, and individuals familiar with the need for the services provided by NTID.

Active Members

Bedarius Bell, Jr.
Director, Special Programs, Alabama Department of Rehabilitation Services

Tina Childress
Educational Audiologist, Urbana School District

Michelle Cummings
Senior R&D Leader, The Dow Chemical Company

Angela Dingle
Founder, DeafCybercon

Al El-Nattar
Omni-Experience Market Unit Leader, Services, Hospitality, and Public Sector, Capgemini

History Estill-Varner '14
Program Manager, HiBob

Dr. Ernest E. Garrett III
Superintendent, Louisiana's Special School District, Chairman of the Louisiana Commission for the Deaf

Cham Leang '03
Senior Project Manager, U.S. Federal Government

Pamela Lloyd-Ogoke '81
Chief of Community Integration Services and Supports, North Carolina Division of Vocational Rehabilitation Services; *Chair*

Marlene Mata
Vocational Rehabilitation Counselor, Massachusetts Rehabilitation Commission

Mary Beth (Barber) Mothersell '85
Accessibility Relationship Manager, T-Mobile Accessibility

Joelene Orlando
Executive Director/President, Whole Me, Inc.

Annette Reichman
Superintendent, Arizona State Schools for the Deaf and the Blind

Arlene Sankey '89, '93
Court Assistant, New York State Unified Court System

Robert Sidansky '77
Retired Administrator of Student Services, National Center on Deafness, California State University, Northridge

Scott Van Nice '01
Director, Proctor & Gamble

U.S. Department of Education

Brianne Burger
Liaison to the Special Institutions, Office of Special Education and Rehabilitative Services

U.S. Government Representatives

The Honorable Kirsten Gillibrand
Member, U.S. Senate, New York State

The Honorable Joseph Morelle
Member, U.S. House of Representatives, 25th District, New York State

The Honorable Charles E. Schumer
Member, U.S. Senate, New York State

Congressman Joe Morelle, fourth from left, joined, from left to right, NTID President Gerry Buckley, Monroe County Executive Adam Bello, Monroe County Sheriff Todd Baxter, and Lewiston, Maine community members Liz Seal, MJ Grant, Kevin Bohlin, and Matt Webster for the Greater Rochester Deaf and Hard-of-Hearing Emergency Preparedness and Response Services Summit, held at NTID May 31, 2024.

NTID Foundation Board

The NTID Foundation is an organization of volunteers committed to advancing the mission of NTID, and the personal and career growth of deaf and hard-of-hearing students.

Foundation Board members foster involvement and private investment to enrich the quality and vitality of the learning environment at NTID.

Active Members:

Gary Behm '78, '81
Associate Vice President, NTID Academic Affairs

Dr. Gerard J. Buckley '78
President, NTID; Vice President and Dean, RIT

Scott Ellender
General Manager and Chief Operating Officer, Monroe Golf Club

Karen Engel
Founding Board Member, Hands & Voices, New York

Steven Engel
Founding Board Member, Hands & Voices, New York

Christopher D. Estrin '94
Chief Operating Officer, Customer Experience, ZVRS

Sean P. Flanagan
Sr. Customer Business Manager, Bayer Consumer Care

Sue Flanagan
Volunteer Event Coordinator

Mark Keffer
Delivery Experience Team, Capital One

Patricia Keffer

Matt Long
Accountant, New Normal Life, LLC

Kathleen Martin
Retired Director of Policy Review and Development, RIT Human Resources

Jeff McCaw '89
Chief Financial Officer, SourceAmerica

Jay McHarg
CEO, AeroSafe Global

Antony McLetchie
Superintendent, Rochester School for the Deaf

Barbara Montan

Matthew S. Moore '83
President, MSM Productions, Ltd.
Chairperson, NTID Performing Arts Advisory Committee

NTID Foundation Board (continued)

Jarrod Musano
Chief Executive Officer, Convo Communications, LLC

Jean-Guy Naud '68, '75 MS
Retired, NTID Faculty

David Officer '87
Lead Systems Analyst, TIAA

Michael Rizzolo '78
President and CEO, Interpretek

Ruchika Sikri
CEO and Co-founder, Ready Platform
General Partner, Wisdom Ventures
Founder and CEO, Mandala Ventures

Chris Soukup
Chief Executive Officer, Communication Services for the Deaf

James Stefano
Retired President, Synergy Global Solutions, Inc.

Rosa Lee Timm '00
Division President, CSD Social Venture Fund, Communication Services for the Deaf
Foundation Board Chairperson

James Tourangeau
District Manager, Sorenson Communications, Inc.

Jon Weintraub
Senior Strategic Planning Associate, Callon Petroleum Company

BJ Wood '75

RIT Administrative Council

Dr. David C. Munson, Jr.
University President

Karen Barrows '04
Chief of Staff

Dr. Gerard J. Buckley '78
President, NTID; Vice President and Dean, RIT

Enid Cardinal
Senior Advisor to the President for Strategic Planning and Sustainability

Phil Castleberry
Vice President for University Advancement

Dr. Lisa Chase
Vice President and Secretary of the University

Bobby Colon
Vice President and General Counsel

Dr. Prabu David
Provost and Senior Vice President for Academic Affairs

Kathleen Davis
Vice President of Enrollment Management and Associate Provost

Robert Finnerty '07
Associate Vice President of University Communications

Vanessa J. Herman
Vice President for Government and Community Relations

Dr. Keith Jenkins
Vice President and Associate Provost for Diversity and Inclusion

Dr. Sandra S. Johnson
Senior Vice President for Student Affairs

Joe Johnston
Ombudsperson

Jo Ellen Pinkham
Associate Vice President and Chief Human Resources Officer

Dr. Ryne Raffaelle
Vice President for Research

John Trierweiler
Vice President, Marketing and Communications, and Chief Marketing Officer

Dr. James H. Watters
Senior Vice President and Treasurer

RIT Board of Trustees Active Trustees (continued)

Pamela Lloyd-Ogoke
BS '81; Chief of Community Integration Services and Supports, North Carolina Division of Vocational Rehabilitation Services; also serves as NTID NAG Representative

Britta I. MacIntosh
BS '89; Senior Vice President of Western Region & London Operations, Ameresco

Austin W. McChord
BS '09; CEO, Casana Care, Inc.

Roosevelt Mercer, Jr.
Chief Executive Officer and Executive Director, Virginia Commercial Space Flight Authority

David C. Munson, Jr.
President, Rochester Institute of Technology

Sharon D. Napier
MS '04; Executive Chair and Founder, Partners + Napier

Brian P. O'Shaughnessy, Esq.
BS '81, MS '84; Partner, Dinsmore & Shohl LLP

Orlando J. Ortiz
BS '04, MBA '08; CEO, RocOn Property Management, LLC; also RIT Alumni Association President

Susan M. Puglia
Chair, Board of Trustees, Rochester Institute of Technology; Retired Vice President, Global Technical Leadership, Sales and Distribution, IBM Corporation

Ronald S. Ricotta
BA '79; CEO and Co-Owner, Century Mold Company, Inc.

Efrain Rivera
Senior Advisor to CEO, Paychex, Inc.

Jorge M. Rodriguez
EMBA '15; CEO, Sorenson Communications, Inc.

Nicholas Schneider
BS '10, MS '10; Partner, Managing Director and Partner, Boston Consulting Group

Frank S. Sklarsky
BS '78; Vice Chair, Board of Trustees, Rochester Institute of Technology; Retired Executive Vice President and Chief Financial Officer, PPG Industries, Inc.

Kevin J. Surace
BT '85; Chairman and CTO, Appvance

James P. Swift
BS '88; CEO, Buxton

Donald J. Truesdale
BS '87; Chair Emeritus, Board of Trustees, Rochester Institute of Technology; Chief Executive Officer, Ardea Partners

RIT Board of Trustees Active Trustees (continued)

Clayton P. Turner
BS '90; Director, NASA Langley Research Center

Kim E. VanGelder
BS '86; Chief Information Officer and Senior Vice President, Eastman Kodak Company

Chester N. Watson
BS '74; Retired General Auditor, General Motors Corporation

Dinah G. Weisberg
MS '97, EMBA '03; President & CEO, REDCOM Laboratories, Inc.

Christine B. Whitman
Chair Emeritus, Board of Trustees, Rochester Institute of Technology; Chairman and CEO, Complemar Partners, Inc.

Kathy M. Yu
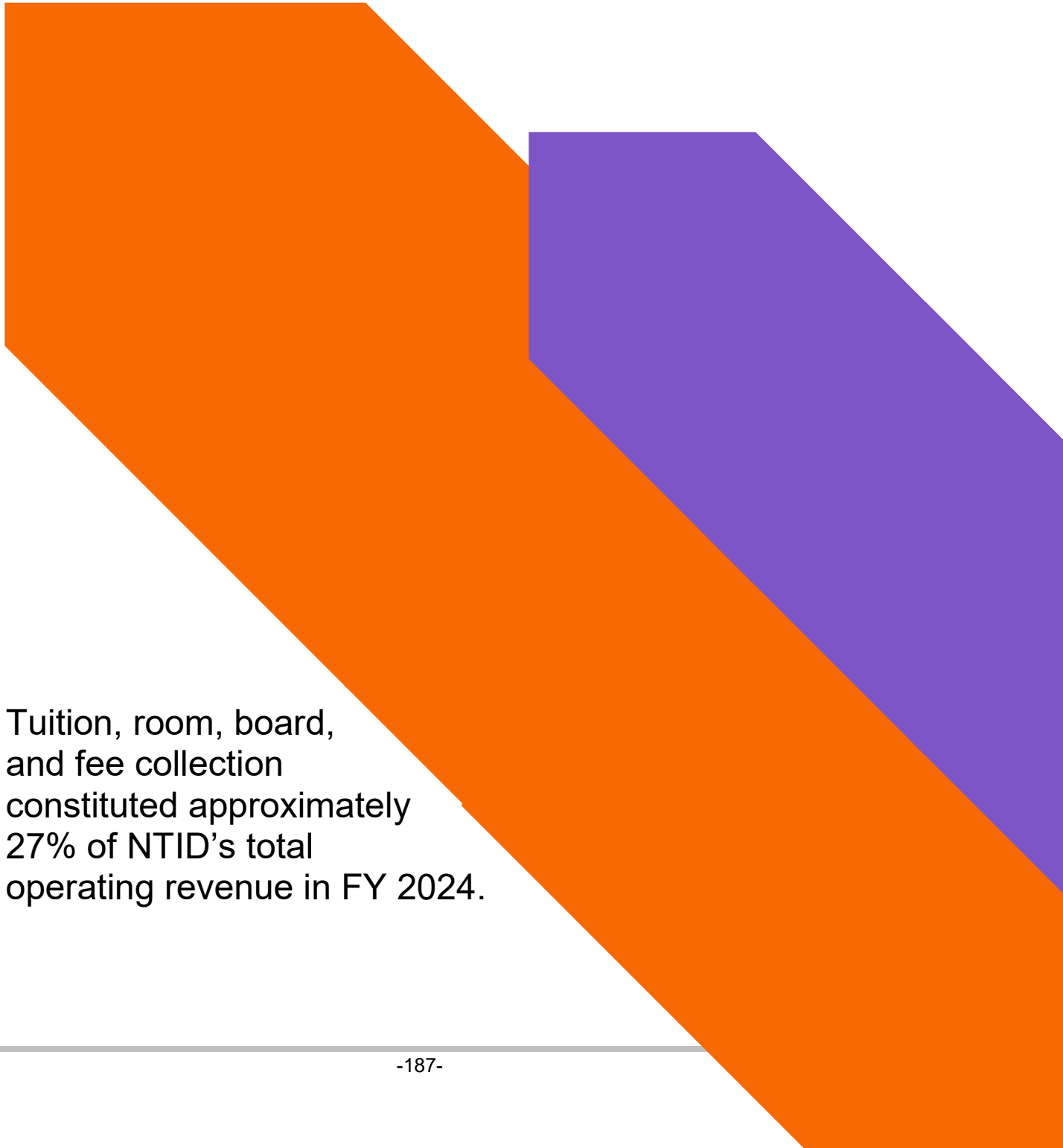BS '91; Retired Director/Advisor, Microsoft, Intel

In February 2024, NTID hosted a Deaf in STEM Conference, geared towards undergraduate students and focused on deaf and hard-of-hearing experiences in STEM employment.

Results of
Financial Operations

Tuition, room, board,
and fee collection
constituted approximately
27% of NTID's total
operating revenue in FY 2024.

Financial Operations Highlights

NTID's commitment to excellent stewardship of resources, while fulfilling our founding institutional mission, resulted in a nominal (1.8%) increase in total expenses for FY 2024.

Total Personnel Compensation increased approximately $2.7 million (5.4%) from FY 2023 levels. This increase in expense was due to filling of open positions, merit increases, market adjustments to recruit and retain highly skilled staff in our Access Services division, and an increase in summer, overload, and adjunct contracts to meet programmatic and curriculum needs.

Total RIT Services expense increased approximately $3.3 million (9.9%) from FY 2023 levels, primarily as a result of an increase in costs related to student services (room, board, athletics, health services) and overhead.

Total Other Expenditures decreased by $4.0 million (-14.6%) in FY 2024, as a result of a $5.9 million year-over-year decrease in plant funds, offset in part by a $1.0 million increase in financial aid, $0.6 million increase in support expenses, and a $0.4 million increase in capital expenses.

NTID's federal appropriation totaled $92.5 million for FY 2024, with $83.0 million identified for operations, consistent with the prior fiscal year's funding level. Non-federal funds increased by approximately $2.0 million (7.1%) for the same period.

As footnoted on the next page, the $9.5 million not included in the statement of financial operating results was specifically designated for regional outreach efforts. In February 2017, NTID and the Alabama Institute for Deaf and Blind (AIDB) formalized a partnership and began executing planned outreach activities. As of September 30, 2024, approximately $1.6 million in expenses were charged against FY 2024 appropriated outreach funds.
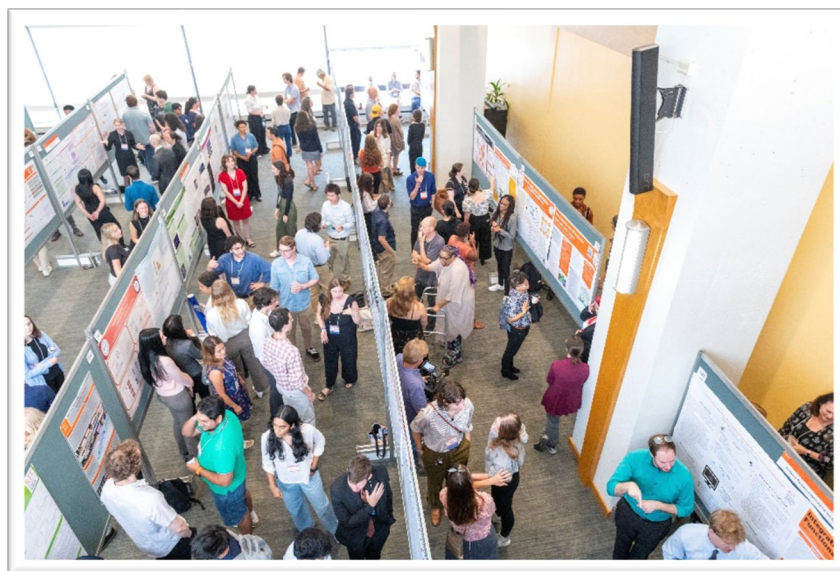
RIT/NTID students presented at RIT's Undergraduate Research Symposium August 1, 2024.

Financial Operating Results

	FY 2023	FY 2024	Variance $	Variance %
EXPENSES				
Salaries and Wages	$37,409,205	$39,553,229	$2,144,023	5.7%
Benefits	13,016,445	13,586,322	569,878	4.4%
Total Personnel Compensation	**$50,425,650**	**$53,139,551**	**$2,713,901**	**5.4%**
RIT Services Expenditures				
Direct:				
Residence Halls/Food Service, Student Services	$7,728,433	$9,335,129	$1,606,696	20.8%
Cross-Registered Tuition	8,778,949	8,883,997	105,048	1.2%
Physical Plant Services	2,998,164	3,158,869	160,705	5.4%
Indirect:				
Overhead	13,923,850	15,358,117	1,434,267	10.3%
Total RIT Services	**$33,429,396**	**$36,736,112**	**$3,306,716**	**9.9%**
Other Expenditures				
Support Expenditures	$8,164,823	$8,806,739	$641,915	7.9%
Grant Cost Shares	54,210	-	-54,210	0.0%
Financial Aid	7,269,042	8,260,578	991,537	13.6%
Capital	904,211	1,286,703	382,492	42.3%
Matching Endowment	405,767	360,608	-45,160	-11.1%
Plant Fund	10,704,317	4,772,021	-5,932,297	-55.4%
Total Other	**$27,502,371**	**$23,486,649**	**-$4,015,723**	**-14.6%**
Total Expenses	**$111,357,417**	**$113,362,311**	**$2,004,894**	**1.8%**
REVENUE				
Federal Appropriation*	$83,000,000	$83,000,000	$0	0.0%
Non-Federal Funds	28,357,417	30,362,311	2,004,895	7.1%
Total Revenue	**$111,357,417**	**$113,362,311**	**$2,004,895**	**1.8%**

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* The FY 2023 and FY 2024 Federal Appropriations were $92,500,000. The $9,500,000 not included in the FY 2023 and FY 2024 totals was specifically designated for regional outreach efforts.

Tuition, Room, Board, and Other Fees

The combined rate increase for tuition, room, board, and fees was 4.1%. These non-federal resource collections constituted approximately 27% of NTID's total operating revenue.
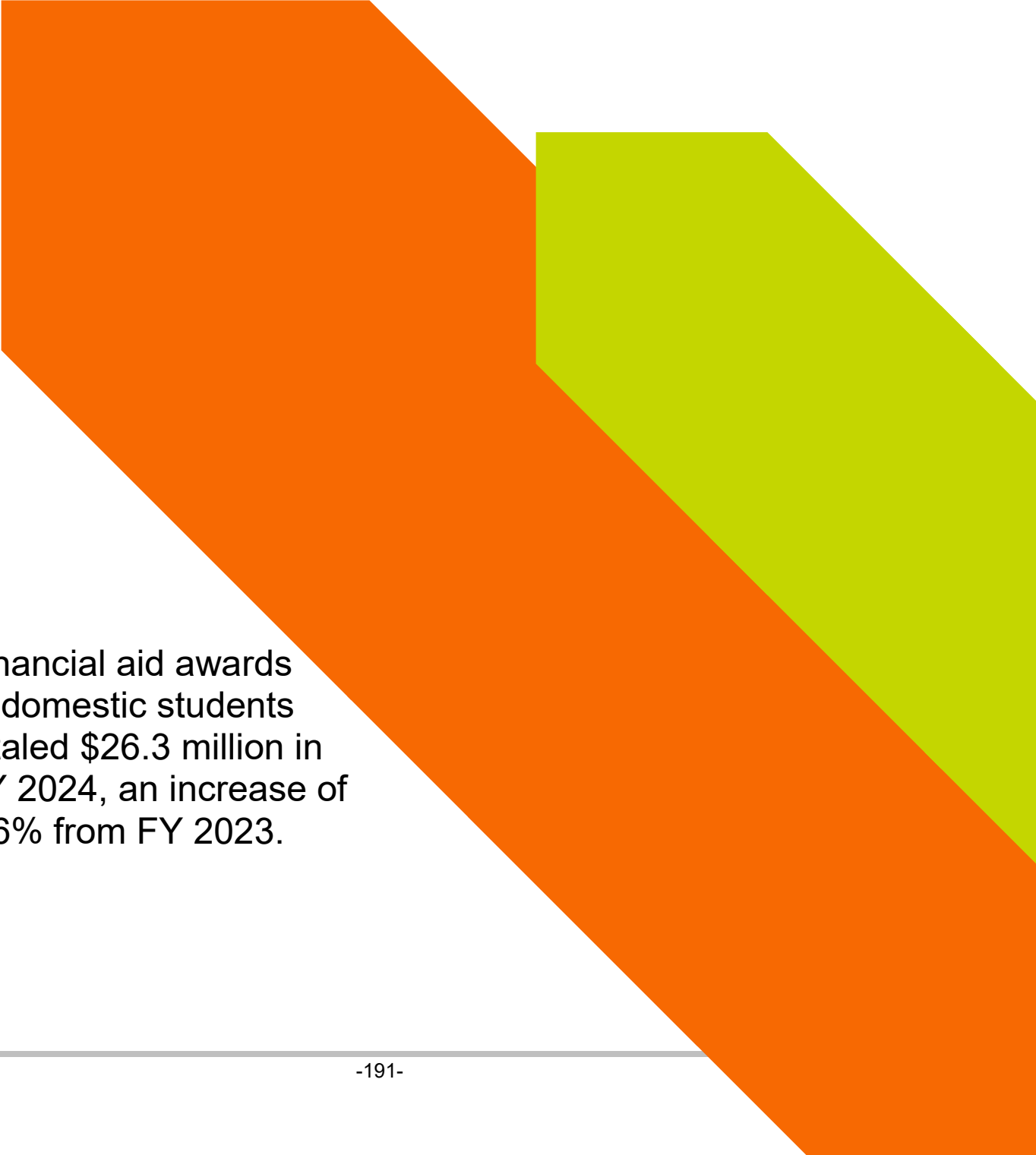
	Rates Charged Students				
	FY 2021	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**
Tuition	$17,814	$18,330	$18,926	$19,778	$20,550
Room	8,140	8,392	8,728	9,032	9,366
Board	5,836	6,040	6,250	6,484	6,776
Fees	676	726	798	880	950
Total	**$32,466**	**$33,488**	**$34,702**	**$36,174**	**$37,642**
Collections	$25,323,553	$27,298,690	$28,357,417	$30,362,311	*
Enrollment (Fall)	1,101	1,166	1,135	1,129	1,176
Collections Per Student	**$23,001**	**$23,412**	**$24,985**	**$26,893**	*

New NTID students get hands-on experience with different majors, such as Laboratory Science Technology, during the Summer Vestibule Program (SVP).

* As of the writing of this report, the collection information for FY 2025 is incomplete.

Financial Aid

Financial aid awards to domestic students totaled $26.3 million in FY 2024, an increase of 7.6% from FY 2023.
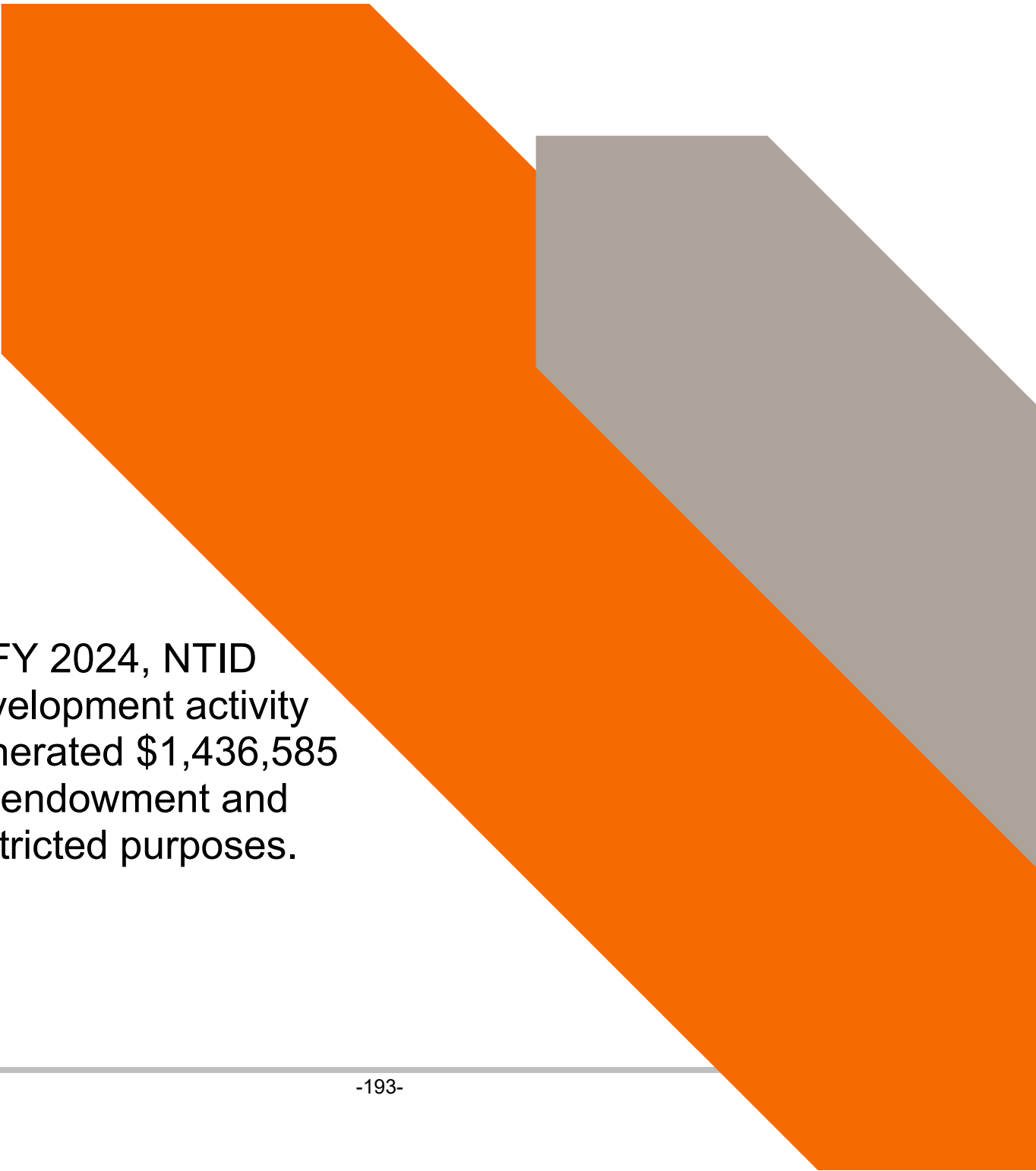
Financial Aid (Domestic Students)

Financial aid awards to domestic students totaled $26.3 million in FY 2024, an increase of 7.6% from FY 2023 levels. Institutionally sponsored aid increased in FY 2024 by 5.3%, while state and federal support increased by 12.7%.

Loans taken out by domestic students decreased by 4.8% to $2.4 million. Overall, the average financial aid (excluding loans) per domestic student increased by 4.8% in FY 2024.

SOURCE OF AID	2023		2024		Amount Diff %
	Awards*	Amount	Awards*	Amount	
INSTITUTIONALLY SPONSORED SUPPORT					
Grant-in-Aid:					
NTID Grant-in-Aid	289	$2,240,215	274	$1,602,742	-28.5%
RIT Grant-in-Aid	11	30,650	1	2,500	-91.8%
Subtotal Grant-in-Aid	300	$2,270,865	275	$1,605,242	-29.3%
Scholarships:					
NTID	717	$4,574,422	725	$5,161,560	12.8%
RIT	231	564,270	245	529,485	-6.2%
NTID Endowments	891	$3,123,492	940	$3,714,416	18.9%
External Groups	76	280,495	96	374,733	33.6%
Subtotal Scholarships	1,915	$8,542,679	2,006	$9,780,194	14.5%
Subtotal Institutionally Sponsored Support	**2,215**	**$10,813,544**	**2,281**	**$11,385,436**	**5.3%**
STATE AND FEDERAL SUPPORT					
Grants:					
Pell Grants	444	$2,515,133	445	$2,599,166	3.3%
State Grants	183	521,881	95	273,024	-47.7%
Subtotal Grants	627	$3,037,014	540	$2,872,190	-5.4%
Other Federal Support:					
Vocational Rehabilitation	548	$7,978,755	604	$9,540,793	19.6%
Federal Work Study	20	45,794	22	56,911	24.3%
Subtotal Other Support	568	$8,024,549	626	$9,597,704	19.6%
Subtotal State and Federal Support	**1,195**	**$11,061,563**	**1,166**	**$12,469,894**	**12.7%**
LOANS					
Subsidized Federal Student Loan	247	$868,663	206	$720,116	-17.1%
Unsubsidized Federal Student Loan	338	1,323,058	312	1,310,863	-0.9%
Parent PLUS Loans	29	377,751	15	115,318	-69.5%
Alternative Loans	0	0	34	300,339	0.0%
Subtotal Loans	**614**	**$2,569,472**	**567**	**$2,446,636**	**-4.8%**
TOTAL ALL FINANCIAL AID	**4,024**	**$24,444,579**	**4,014**	**$26,301,966**	**7.6%**
Domestic Student Enrollment		**1,099**		**1,144**	**4.1%**
Average Financial Aid per Student		**$22,243**		**$22,991**	**3.4%**
Average Financial Aid per Student Excluding Loans		**$19,905**		**$20,853**	**4.8%**

* Students receive more than one form of aid; therefore, the numbers of awards (grants, loans, scholarship, etc.) outnumber the student body.

External Funding Sources

In FY 2024, NTID development activity generated $1,436,585 for endowment and restricted purposes.

The NTID Foundation

NTID received $2,501,683 in new commitments of support including outright gifts of cash and equivalents, gifts-in-kind, deferred gifts, and pledges. These dollars were designated to support NTID endowed funds, facilities upgrades, and a variety of research and pre-college outreach programs.

Contributions of $10,000 and above received during FY 2024 include:

Anonymous
Communication Services for the Deaf
Convo Communications, LLC
Loraine DiPietro
Camille & Henry Dreyfus Foundation
Julie Tibbit Feldman '00 and Shane Feldman '00
Helen Frankenthaler Foundation
Google, Inc.
Debbe Hagner '79, '81
William Randolph Hearst Foundation
Hebrew Association of the Deaf Memorial Foundation
Andrew R. Jacobson '90, '96
Jephson Educational Trusts
Daniel and Jill Kaiser
Lewis M. Merkin
Motorola Solutions Foundation
Nippon Foundation
David '87 and Angela '88 Officer
Orange Capital Media, LLC
Albert Pimentel
Rochester Area Community Foundation
Marc Roer '81
Santa Rita Foundation
Sorenson Communications, Inc.
U.S. Charitable Gift Trust
ZP Better Together, LLC

NTID Annual Fundraising Results

Through the ongoing support of the NTID Foundation, the college's development program continues to be successful. The substantial sums that NTID raises demonstrate NTID's commitment to seeking alternative sources of public and private support. In FY 2024, NTID development activity generated $1,436,585 for endowment and restricted purposes. Of that amount, $360,608 was matched with federal dollars and directed toward NTID's endowed scholarship funds.

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Endowment and Restricted Funds	$907,640	$1,165,293	$1,346,832	$1,335,420	$1,436,585
Equipment and Software	$29,243	$65,599	$140,990	$0	$35,485
Total	**$936,883**	**$1,230,892**	**$1,487,822**	**$1,335,420**	**$1,472,070**

The Deaf Creators Play Festival, hosted by NTID Performing Arts, featured three one-act plays by diverse Deaf, deaf, and hard-of-hearing playwrights.

NTID Endowment Programs

A total of $1,436,585, including matching federal funds* of $360,608, was added to the Federal Matching Endowment Fund corpus in 2024. The market value of NTID's Federal Matching Endowment portfolio stands at $97,009,448.

The market value of NTID's total endowments, which include privately raised funds prior to the establishment of the Federal Matching Endowment program, is $154,922,460.

Value as of September 30, 2024

	Contributed Value	Market Value
Funds Subject to Federal Investment and Spending Guidelines		
Private	$3,111,824	$5,391,232
Federal	$3,107,059	$5,141,987
Subtotal	$6,218,883	$10,533,219
Funds No Longer Subject to Federal Investment and Spending Guidelines	$27,779,658	$86,476,229
Total Federal Endowment	**$33,998,541**	**$97,009,448**

Other Endowments	Contributed Value	Market Value
Private	$43,231,640	$57,913,012
Total Endowments	**$77,230,181**	**$154,922,460**

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* Any monies matched must be funded through operating funds efficiencies.

Scholarships, Endowed Funds, and Estate Commitments

The generosity of a large number of friends of
NTID has resulted in the following scholarships,
endowed funds, and estate commitments
benefiting NTID students.

Stephanie S. Albert Memorial Endowed Scholarship Fund

Kathleen M. Anderson Endowed Scholarship

Dorothy E. Ann Fund (D.E.A.F.) Endowed Scholarship Fund

Anonymous Endowed Scholarship for Undergraduate Students in Science and Mathematics

Anonymous Endowment for NTID Faculty Research in Science and Mathematics

Barlow Endowed Scholarship Fund

Alice Beardsley Memorial Endowed Scholarship Fund for Interpreting Students at NTID

Behm Family Endowed Support Fund in Student Innovation, Technology, and Research

Ned Behnke Memorial Endowed Scholarship Fund

Frank P. Benz Jr. Memorial Scholarship

Doris W. Blanchard Endowed Scholarship Fund

Jane D. Bolduc Endowed Scholarship

Farid Bozorgi Memorial Endowed Scholarship Fund

Andrew and Mary Brenneman Annual Scholarship

Brewer and Albanese Endowed Scholarship

Gladys Brooks Endowed Fund for the Laboratory Science Technology Program

Johnnie Brown (JB) Black History Month Celebration Endowment

Dr. Gerard Buckley Student Leadership Endowment

Citicorp/Citibank Endowed Scholarship Fund at NTID

Dr. Karen K. Conner Annual Scholarship Fund

Convo Endowed Scholarship

Continental Corporation Endowed Scholarship Fund at NTID

Lillian M. Cowin Memorial Endowed Scholarship Fund

Robert R. and Donna E. Davila Endowed Scholarship Fund

James J. DeCaro Endowed Scholarship Fund

James and Patricia DeCaro Endowed Scholarship

Delta Sigma Phi Fraternity Endowed Scholarship Fund

Ronald Dodge Faculty/Staff Grants Endowed Fund

Ronald Dodge Memorial Endowed Scholarship Fund

Dreyfus Foundation Laboratory Science Technology Endowed Student Support Fund

DSK Endowed Scholarship Fund

Mr. and Mrs. Joseph F. Dyer Endowed Scholarship Fund

Joseph F. and Helen C. Dyer Arts Center Endowed Fund

Max Factor Family Foundation Endowed Scholarship Fund

Scholarships, Endowed Funds, and Estate Commitments (continued)

Barbara M. Fallon KPMG Memorial Endowed Scholarship Fund

Rose and George Feigenbaum Endowed Scholarship Fund

Ruth H. Fenyvessy Memorial Endowed Scholarship Fund

Curt and Jean Feuer Scholarship at NTID

Maurice and Maxine Forman Endowed Scholarship Fund

Ann Wadsworth Frisina Memorial Endowed Scholarship Fund

Dr. Robert Frisina Award

Max and Helene Frumkes Memorial Endowed Scholarship Fund

Garlinghouse Endowed Scholarship Fund

Warren Goldmann Endowed Scholarship Fund

Allen and Gloria Gopen Endowed Scholarship Fund

Debbe A. Hagner Endowed Lecture at NTID

Mildred F. Hall Endowed Scholarship Fund

Jennifer Van Atta Hayes Memorial Endowed Scholarship

William Randolph Hearst Endowed Scholarship Fund for Financially Disadvantaged Students

William Randolph Hearst Scholarship Fund

Dr. Mary Jane Hellyar Endowed Scholarship Fund

Frank Horton Endowed Scholarship Fund

William "Dummy" Hoy OTB Endowed Scholarship

T. Alan and Vicki T. Hurwitz Family Endowed Scholarship Fund

Ralph Hymes Endowed Scholarship Fund

Linda A. Iacelli Endowed Student Support Fund

Interpretek Endowed Scholarship Fund

Andrew Jacobson Endowed Scholarship Fund

Lucille Ritter Jennings Endowed Scholarship Fund

Jephson Educational Trust Endowed Scholarship Fund for the Performing Arts

JHB Anonymous Scholarship Fund

Johnson Scholarship Foundation Endowed Scholarship for Innovation and Entrepreneurship

Kaiser Family Endowed Scholarship

David T. Kearns Endowed Scholarship Fund for Technical Excellence

Ron and Lyn Kelly Endowed Scholarship for Deaf and Hard-of-Hearing Students

Drew and Frances King Endowment Fund

Sara L. Kuhnert Endowed Scholarship Fund

La Sala Foundation Doctoral Fellowship Fund

Johanna Larson Endowed Fund for Health Care Education

Johanna Larson Endowed Scholarship in the Allied Health Disciplines

Michael E. Lawson Endowed Scholarship

Edward H. Lichtenstein Memorial Endowed Scholarship Fund

Scholarships, Endowed Funds, and Estate Commitments (continued)

Dr. Frank W. Lovejoy Jr. Endowment for Deafness Research

Edmund Lyon Memorial Lectureship Fund

Maguire Scholars Program at NTID

Dr. James C. Marsters Endowed Scholarship Fund

Martin Family Endowed Scholarship

Dr. Robert S. and Carol D. Menchel Endowed Scholarship Fund

Chris and Lisa Morgan Endowed Scholarship

Kevin Mowl Memorial Endowed Scholarship Fund

Mageeda Murad Endowed Scholarship Fund

Dr. Genji Murai Endowed Scholarship Fund

Mutterer Family Endowed Scholarship Fund

Alvina Narkin Endowment

M. L. Navrat Endowed Scholarship Fund for NTID

Ruth G. Norton Endowed Scholarship Fund

NTID Alumni Association Endowed Scholarship Fund

NTID Anonymous #12 Endowed Scholarship Fund

NTID Anonymous #21 Endowed Scholarship Fund

NTID Architectural Technology Award Endowed Scholarship Fund

NTID Business Careers Endowed Scholarship Fund

NTID Emergency EYF Student Scholarship Fund

NTID Endowed Scholarship in the Visual Arts Disciplines

NTID Foundation Endowed Scholarship Fund

NTID Performing Arts Endowed Scholarship Fund

NTID President and Dean's Scholarship for Academic Excellence

NTID Scholarship Fund

NTID Science and Engineering Careers Endowed Scholarship Fund

NTID Student Leadership Endowed Fund

NTID Summer Transition Program Endowment

NTID Visual Communications Endowed Scholarship Fund

NYS Federation of Home Bureaus, Inc. Endowed Scholarship Fund in Honor of Martha Perry

David and Angie Officer Endowed Scholarship

Milton H. and Ray B. Ohringer Endowed Scholarship Fund

Robert F. Panara Endowed Scholarship Fund

Shirley M. Panara Memorial Endowed Fund

Lori Love Peters Endowed Scholarship

Albert T. Pimentel Endowed Scholarship

Sally J. Pimentel Endowed Scholarship

Scholarships, Endowed Funds, and Estate Commitments (continued)

Plough-Estrin Memorial Endowed Scholarship

Pulver Family Endowed Scholarship Fund

Marie L. Raman Endowed Award for Deaf and Hard of Hearing Students

Randleman Endowment for Interpreter Certification

Robert W. Rice Endowed Scholarship Fund

RIT Celebration of Community Endowed Fund

Mary Hope Robinson Endowment for the Performing Arts

Rodriguez-Sorenson Communications Endowed Scholarship

Dr. Ellie Rosenfield Endowed Scholarship Fund

Rothman Family Endowment Fund

Elizabeth Dunlap Sargent Memorial Endowed Scholarship Fund

Ryoichi Sasakawa / James J. DeCaro Endowed Scholarship Fund

Edward L. Scouten Endowed Fund for English Literacy

Wilfrid and Isabel Searjeant Endowed Scholarship Fund

Shelby Center for Excellence Scholarship Fund

Mu Zeta Chapter of Sigma Nu Endowed Scholarship Fund

S. Richard Silverman Endowed Scholarship Fund for International Deaf Students

Carolie R. Simone Endowed Scholarship Fund

Edythe and Edward Sklar Endowed Scholarship Fund

Skyer Family Foundation Endowed Scholarship

David Smith Memorial Endowed Scholarship Fund

Benjamin J. Soukup Endowed Scholarship Fund

Sprint Endowed Scholarship Fund

Dr. Frank B. Sullivan Endowed Scholarship Fund

Frank B. Sullivan Exemplary Business Student Award

Frank B. Sullivan Outstanding Graduate Business Student Award

Frank B. Sullivan Outstanding Student in Business Award

Solon E. Summerfield Foundation Endowed Scholarship Fund

Michael A. Swartzman Memorial Endowed Scholarship Fund

Paul L. and Sally A. Taylor Endowed Scholarship Fund

Michael Thomas Endowed Scholarship Fund in the Performing Arts

Eloise Thornberry Endowed Scholarship Fund

Tibbitt-Feldman Endowed Scholarship

W. Paul Urich Memorial Endowed Scholarship Fund

Al Van Nevel Memorial Foundation Scholarship for Excellence in Business Studies at NTID

James Ventimiglia Memorial Printing Award Endowed Fund

Elizabeth W. Williams Endowed Fund for the Performing Arts

Joseph C. and Loretta F. Wolf Endowed Scholarship Fund

Louis S. and Molly B. Wolk Foundation Endowed Scholarship Fund for Deaf Students at RIT

The Woman's Club of Rochester Endowed Scholarship Fund for Deaf Students at RIT

BJ Wood '75 Endowed Scholarship

Women's Council Endowed Scholarship Fund for Deaf and Hard-of-Hearing Students at RIT

WSK Endowed Scholarship Fund

Wu/Liu Family Endowed Scholarship

In 2024, RIT trustee and alumnus Andrew Jacobson '90, '96, pledged $1 million in support of NTID via the Andrew Jacobson Endowed Scholarship, the largest commitment by an RIT/NTID alumnus in NTID history.

Grants and Contracts

During FY 2024, NTID submitted 23 new grant proposals requesting a total of $20,609,737 in funding. Eight proposals were funded for a total of $1,937,209; nine proposals are still pending; six proposals were not funded.

As of September 30, 2024, the annual reimbursed expenditures of all grants and contracts at NTID totaled $3,185,676 with a total value of $13,019,027 over the lives of the projects.

Project Title	Grant Provider	Year	Amount FY 2024	Total Value
Evaluating the Use of Mixed Reality Smart Glasses for Real-Time Captioning Display and Interpreting Services	DHHS Administration for Community Living (ACL)	1/3	$145,685	$400,000
Renewal of the DeafTEC Resource Center	National Science Foundation	2/3	$513,115	$1,649,965
Establishment of Centers of Employment for the Deaf in the Philippines and Viet Nam: Deaf GROW (Growing Regional Opportunities for Work)	The Nippon Foundation	1/2	$205,975	$610,140
Rochester Institute of Technology U-RISE Biomedical Scientists-in-Training Program for Deaf and Hard-of-Hearing Undergraduates (RIT U-RISE)	National Institutes of Health	3/6	$207,213	$721,872
Parents Empowering Parents: Resources for Deaf Parents	DHHS.Administration for Community Living / Brandeis University	1/3	$25,787	$58,837
FCC Telecommunications Relay Services Collaboration of Expertise 2024-2025	DHHS.Centers for Medicare & Medicaid Services / MITRE Corporation	1/2	$12,714	$755,384
Brief but Spectacular: New Windows into the Physics of Common Envelope Evolution	National Science Foundation	4/4	$181,821	$341,225
Deaf Preschoolers' Exploratory Behaviors and Parent Guidance during Shared Museum Experiences	National Institutes of Health	2/3	$86,738	$428,054
Rochester Bridges to the Doctorate for Deaf and Hard-of-Hearing Students	National Institutes of Health	2/5	$283,400	$585,107
Neurocognitive Plasticity in Young Deaf Adults: Effects of Cochlear Implantation and Sign Language Exposure	National Institutes of Health	7/7	$300,915	$2,604,026
DeafTEC Ready Project	National Science Foundation	4/4	$13,194	$470,069
Protactile Children's Theatre and Protactile Theatre at NTID - Year 2	NYS Council on the Arts	2/2	$19,585	$49,500
Core support for the Morpheyes Studio Project	Ford Foundation	3/3	$74,932	$190,000
Establishment of Centers of Employment for the Deaf in the Philippines and Vietnam	The Nippon Foundation	4/4	$44,572	$464,814
Rochester Partnership to Advance Research and Academic Careers in Deaf Scholars	National Institutes of Health / University of Rochester	3/5	$57,331	$189,894
Establishment of Centers of Employment for the Deaf in the Philippines and Viet Nam: Deaf GROW (Growing Regional Opportunities for Work) - Part 2	The Nippon Foundation	2/2	$271,620	$592,009
AccessATE: Making Community College Technical Education More Accessible for Everyone	National Science Foundation	6/6	$13,097	$202,811

Grants and Contracts (continued)

Project Title	Grant Provider	Year	Amount FY 2024	Total Value
DeafTEC Resource Center	National Science Foundation	7/7	$55,098	$1,649,928
FCC Telecommunications Relay Services (TRS) Tasks 1-6	Center for Medicare & Medicaid Services / MITRE Corporation	2/2	$550,096	$755,392
Do Tactile Exploratory Behaviors in the Classroom Predict Language Development in Deaf Signing Children?	J S McDonnell Foundation	3/5	$106,274	$250,000
Bringing H is for Hormones to Schools for the Deaf	IF THEN Inc	2/2	$16,514	$50,000
Total			**$3,185,676**	**$13,019,027**