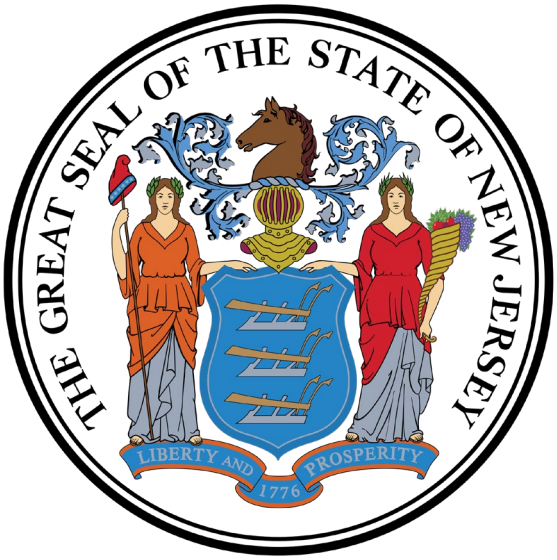
New Jersey State Department of Education
Perkins V Plan
[Draft]



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Executive Summary

The New Jersey State Perkins V Plan is a blueprint for a statewide career education and workforce effort. It identifies two foundational elements and four strategic goals that will lay the foundation for the next generation of career education and talent development at the secondary and postsecondary levels in New Jersey public institutions. This state framework will govern policy direction, guide new initiatives and drive investment strategies for both federal programs and state projects. This Perkins V Plan will serve as the cornerstone for programmatic investments and capacity-building efforts that will enhance service delivery at state and local levels. New Jersey celebrates a long history in creating a highly educated workforce and must now focus on building a stronger and fairer future for the residents of our state, where innovation and diversity are the foundation of our growing economy.

Acknowledgements

The New Jersey Department of Education (NJDOE) is deeply inspired by visionary Governor Phillip D. Murphy and his commitment to building a "stronger and fairer economy" for New Jersey. We thank Commissioner of Education Dr. Lamont O. Repollet for his strong leadership, as well as Assistant Commissioner of the Division of Academics and Performance, Dr. Linda P. Eno, for her tireless effort and extensive guidance that was essential in the crafting of this plan. The NJDOE also extends its gratitude to the members of the New Jersey State Board of Education, the New Jersey Career and Technical Education Advisory Council, New Jersey Council of County Vocational Technical Schools, and the New Jersey Council of County Colleges, New Jersey Department of Labor and Workforce Development, and the State Employment and Training Commission for their insightful contributions and steadfast partnership.

The NJDOE also acknowledges the thousands of students, parents, teachers, professors, administrators, community members, sister agency members and business and industry partners that participated in our stakeholder outreach over the 2019-2020 transition year, whose voices and stories inspired the heart of this plan.

Introduction

In October of 2018, Governor Phillip D. Murphy unveiled his visionary economic development strategic plan entitled "The State of Innovation: Building a Stronger and Fairer New Jersey" in order to set New Jersey on the path to a stronger and fairer future where innovation and diversity are at the forefront of the State's economy:

> "Today we say that New Jersey will once again be a visionary leader in our national and global economy. We have all the ingredients – and now we have the plan. It was a plan created not in a dark corner but through hundreds of meetings with hundreds of people across our state who have a stake in our future success: business leaders, labor leaders, educators at all levels, community and faith leaders, state, county, and local officials, our tremendous Cabinet team. We will make New Jersey a true State of Innovation, and no community will be left behind."

New Jersey has long been considered an innovation-driven state with a substantial footprint from the pharmaceutical and life sciences sectors. The spirit of innovation drove the creation of jobs with family-sustaining wages, established a strong middle class and stimulated far-reaching economic growth. Despite this celebrated past and ideal geographical placement between two major cities, New Jersey added virtually no net new private sector jobs between 2007 and 2017, despite other states posting increases in jobs during that time. At the same time, more than one-third of residents cannot afford everyday household needs and New Jersey has experienced the fourth fastest growth in its poverty rate compared to all other states.

Before developing his economic development plan, Governor Murphy considered the root cause of this economic slide. In his speech, the Governor attributed the state's recently lagging economic growth to a pattern of underinvestment in its people. He noted that this underinvestment resulted from of a lack of focus on education and workforce development, as well as an overall failure to support communities, which ultimately hindered New Jersey's ability to attract and retain new talent and to fully develop the state's homegrown workforce.

Governor Murphy emphasized that the success of the plan will hinge on inclusivity and a renewal of the state's leadership in innovation. He spoke directly to the need for increased opportunities for women, people of color and immigrants, and provided specific metrics to quantify progress. The plan advances five key goals, to be met by 2025, with the following measurable objectives:

I. **Drive faster job growth than other Northeast peer states** by fostering a better, more supportive business climate to add approximately 300,000 jobs
II. **Achieve faster median wage growth than all Northeast peer states** by achieving approximately four percent wage growth or a $1,500 increase in median wages
III. **Create the most diverse innovation ecosystem in the nation and double venture capital investment** in the state by bringing approximately 40,000 more women and minorities into Science, Technology, Engineering and Math (STEM) fields and attracting $625 million in new venture capital investment
IV. **Close the racial and gender wage and employment gaps** by employing approximately 42,000 more women and minorities and increasing wages for those groups by $15,000 to $23,000

V. Encourage thriving and inclusive New Jersey urban centers and downtowns by **reducing city poverty rates to today's statewide average**

The plan includes the following four strategic priorities, with targeted initiatives designed to support those priorities:

- **Invest in people** to help all New Jersey residents find work that supports and sustains families;
- **Invest in communities** to build world-class cities, towns and infrastructure statewide;
- **Make New Jersey the State of Innovation** to create more and better jobs; and
- **Improve government efficiency** and advance New Jersey's competitiveness and business climate

These goals, objectives and priorities have guided the New Jersey Department of Education (NJDOE) in the development of several strong career-focused education initiatives over the past few years. These initiatives began shortly after Governor Murphy's unveiling of the economic development plan and have served as a foundation to springboard the NJDOE into a new era of innovative policy and practice. The renewed focus on workforce development, vocational training and apprenticeship programs serve to support this vision of a "stronger and fairer economy," including:

- Provide local **communities with a stronger voice** in education policy decisions;
- **Increase access to STEM** and Computer Science curricula;
- **Expand career readiness** through New Jersey Apprenticeship Network and career pathways;
- **Expanding access to community colleges** for high school students.

The mission of the NJDOE supports the Governor's education initiatives by ensuring all New Jersey's 1.4 million students have equitable access to high-quality education and achieve academic excellence. The NJDOE believes a strong foundation of high-quality career and technical education (CTE) lays the groundwork for students to have equitable access to career pathways and programs that prepare them with the skills and knowledge necessary for postsecondary success, whether they choose to enter college or join the workforce directly from high school.

New Jersey welcomes the opportunity to develop a state plan for the *Strengthening Career and Technical Education for the 21st Century* (Perkins V) Act. The legislation's increased focus on stakeholder engagement echoes the Governor's call for the inclusion of communities in shaping public policy. The Perkins V Stakeholder Engagement Process as well as the Comprehensive Local Needs Assessments will give local communities a voice in designing a system of career pathways programs that will support a stronger state economy. This system will be designed with a focus on serving special populations to ensure equitable access to these pathways. Providing all students equitable access to high quality career and technical education will help New Jersey realize the vision of a stronger, fairer economy supported by a diverse and well-qualified workforce.

Mission: *The Office of Career Readiness supports districts to develop the career programming aligned to priority sectors in New Jersey.*

Vision: *All New Jersey students have equitable access to high-quality career and technical education to be on a path to postsecondary success.*

A Focus on Innovation

Over the 2019-2020 transition year, inspired by the Governor's vision and prompted by the new legislation, the Office of Career Readiness began conversations around the state with entirely new audiences and continued to engage the most trusted partners in career and technical education (CTE). During these forums, focus groups, phone calls and in-person conversations, the office pursued expanded definitions of student success, considered the range of more personalized approaches that could better meet the needs of underserved students and explored new models of career and technical education in settings. For many, the very real challenges of change management within their communities and schools and discovering new ways to promote scale with quality dominated our discussions around the state.

But for a state with counties as diverse as New Jersey, no one new measure, model or opportunity would provide a plausible solution statewide. As the input and feedback from our communities began to pour in, it became clear if the New Jersey Department of Education (NJDOE) was to design a plan capable of meeting the unique needs of our students and their communities, it must be developed to promote customization and support innovation at the county level. The Comprehensive Local Needs Assessment county-level process will identify the key CTE priorities for each county and provide a focus for larger systemic efforts. To fund these customized innovative solutions, New Jersey is reserving 15% of the local funds for alternative distribution to local programs. Of the 15%, half of this reserve will be allocated to a competitive grant that supports partnership-based innovation at the county-level to increase access and opportunity to CTE for all New Jersey students.

Throughout the transition year, best practices in career preparation in New Jersey schools were identified and considered as possible replicable models of innovation. These programs and practices were analyzed extensively to determine the parameters that supported success, the environment and culture that generated the creative solutions, as well as the contextual and policy barriers that may have inhibited them. These case studies of best practices appear throughout the New Jersey Perkins V State Plan as "Innovation Inspirations" that highlight the carefully crafted advances in CTE made by our district and college partners over the past few years. It is the hope of the NJDOE that these models serve not as a blueprint for a uniform solution for each county, but rather a springboard for conversations to begin around innovation and opportunity at the local levels.

New Jersey's Perkins V Plan: Key Features

Findings from Stakeholder Engagement

The New Jersey Department of Education (NJDOE) spent the transition year in a deep process of consulting stakeholders to the Perkins V four-year plan. This included a regional focus, where workforce development boards, county colleges, comprehensive school districts and county vocational school districts met in a forum to share their insights on the opportunities, strengths and areas in need of improvement for their region. The second phase of outreach included a series of online surveys that were each targeted to a specific audience: student, parent/family, community and businesses.

The response was overwhelming; over 10,000 unique individuals completed the surveys and offered their perspectives on the future of career and technical education (CTE). Any stakeholder groups that were not engaged in adequate numbers by the forums and electronic surveys were contacted directly for follow-up. Focus groups and phone interviews were conducted specifically for underrepresented audiences to ensure that an effort was made to capture every perspective in the development of the state plan. The NJDOE cleaned and coded both the qualitative and quantitative data and prepared a series of reports. Several decision points were almost universally recommended; others required further consultation with expert partners. The following is a synopsis of those key decisions that emerged from input from our stakeholders.

An Assurance of Postsecondary Success

A stronger, fairer New Jersey can only be achieved if a New Jersey high school diploma is a **statement of assurance** that a public-school student is **on a path to postsecondary success**.

"On a path" is defined as the student having a viable **postsecondary plan** to earn and/or learn. Key indicators of a student's viable plan include, but are not limited to:

- at least six college credits related to the student's plan;
- an industry-valued credential related to the student's plan;
- work-based experience related to the student's plan; and
- a score predicting success on an assessment related to the student's plan.

To this end, the NJDOE Office of Career Readiness proposes some fundamental shifts in the nature of CTE programs in the state. The revisions were made in alignment to the Perkins V legislation, as well as in response to the thoughtful contributions of our diverse stakeholders.

Changes in Career and Technical Education (CTE) Programing

A new, formal definition for CTE programs of study is introduced in Section 3 of the Act and is emphasized throughout the Perkins V legislation.

New Perkins V Definition of Program of Study:

A coordinated, non-duplicative sequence of academic and technical content at the secondary and postsecondary level that-

a) incorporates challenging state academic standards, including those adopted by a state under section 1111(b)1 of the Elementary and Secondary Education Act of 1965;
b) addresses both academic and technical knowledge and skills, including employability skills;
c) is aligned with the needs of industries in the economy of the state, region, Tribal community or local area;
d) progresses in specificity (beginning with all aspects of an industry or career cluster and leading to more occupation-specific instruction);
e) has multiple entry and exit points that incorporate credentialing; and
f) culminates in the attainment of a **recognized postsecondary credential[1].**

[1] Per Workforce Innovation and Opportunity Act TEGL 10-16, a recognized postsecondary credential "means a credential consisting of an industry-recognized certificate or certification, a certificate of completion of an apprenticeship, a license recognized by the State involved or Federal Government, or an associate or baccalaureate degree"

Career and Technical Education (CTE) Program Definitions

Size (Numerical Value)	Scope (Curricular Concerns)	Quality (Measurable Results)
Programs must include a coherent sequence of not fewer than three CTE courses; or two years of CTE courses for a County Vocational-Technical School District	Fundable programs will transition over time to become programs of study, where students are prepared to obtain a recognized postsecondary credential[1]	Fundable programs are limited to programs that prepare students for occupations that meet at least two of the three criteria: high-skill, high-wage and in-demand occupations
Minimum of 10 students per program level/per year; *abnormal one-year drop in enrollment will not cause concern until a downward trend emerges*	The curriculum offers academic, technical and employability skills verified by an advisory board specific to the program	Students are achieving program goals, objectives and are making progress toward each of the indicators
Schools must offer a minimum of one approved program of study to receive funding, *but must transition all programs over the next three years*[2]	Links or pathways must exist between the secondary and postsecondary CTE programs of study	The program has certified teachers providing instruction on industry and academic standards
Advisory boards must be composed of at least 30% of participants with industry experience specific to the program	The curriculum shows a progression of instruction towards an occupation or profession and includes pathways to advancement	All students have engaged in internships, apprenticeships and/or work-based experiences *in the related industry* by the end-of-program completion

CTE programs must support career pathways meeting two of the following three criteria:

High-skill occupations require a high level of knowledge in a technical domain and may have credentials, certificates and degrees associated with advancement. Each level of typical educational attainment will have a set of occupations classified as high skill.[3] These occupations may not require a bachelor's degree for entry into the field but have pathways at access at multiple points and leading to advancement.

High-wage occupations pay at or above the median hourly wage ($20.96) or the mean annual wage for New Jersey ($58,210). This calculation will be adjusted annually and provided to the New Jersey Department of Education (NJDOE) by New Jersey Department of Labor and Workforce Development.

In-demand occupations have more than the median number of total (growth plus replacement) openings statewide or in a particular region. This data at the county level will be provided annually by NJDOL to the NJDOE for use by LEAs in the Comprehensive Local Needs Assessment.

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[1] Per WIOA TEGL 10-16, a **recognized postsecondary credential** "means a credential consisting of an industry-recognized certificate or certification, a certificate of completion of an apprenticeship, a license recognized by the State involved or Federal Government, or an associate or baccalaureate degree."

[2] All funded CTE programs must develop a plan over the next three years to include attainment of a recognized postsecondary credential in the transition towards Programs of Study

[3] The NJDOL's Office of Research and Information has provided NJDOE with a formal methodology for the identification of specific high-wage, in-demand occupations. The list of these occupations will be provided as a reference to LEAs annually.

Split of Funds

New Jersey will use 15% of the total allocation for **state funds**, with 10% for state leadership activities, (see p. 30) including professional development, technical assistance, career and technical education (CTE) in correctional institutions and services that prepare individuals for non-traditional fields. Another five percent are used for state administrative expenses.

The other 85% of **local funds** is allocated by formula, with the state reserving 15% of the local funds for alternative distribution to local programs (reserve fund). This increase in reserve funds will be used to support innovation in closing equity gaps and increasing access and opportunity to CTE for all New Jersey students. Almost unanimously, stakeholders called attention to the need to expand CTE offerings, focusing on the fact that not all students in New Jersey possess equal opportunities to access CTE programming. The county-level competitive grants allow counties to collaborate to develop an innovative strategy to increase access to CTE for underserved populations, with the design uniquely crafted to the needs of their own students.

The remaining local funds will be split between **secondary (55%) and postsecondary (45%)** education.

Performance Indicators

The selected quality performance indicator will be **% of Students Participating in Work-based Learning**; however, data will be collected by districts and reported to the NJDOE in both Attainment of Postsecondary Credential and Attainment of Postsecondary Credits as well.

Middle Grades

The NJDOE will encourage and support the development of career awareness in middle grades through both leadership and innovation funds. Through close collaboration within the Division of Academics and Performance, the Office of Academic Standards and the Office of Career Readiness will work together to encourage innovation in developing stronger career pathways beginning at earlier grade levels. The partnership will result in products that provide clearer guidance, higher-quality curricular resources and will also provide financial support towards those ends at the state and local levels.

The NJDOE is also focused on increasing academic preparation for middle school students in advance of entry into rigorous CTE programs at the high school level. Pathway in Technology Early College High School (P-TECH) districts across the state (see p. 53) feature summer bridge opportunities that offer middle school students targeted support in math, language arts and science. This model can be modified or replicated to prepare academically at-risk populations of students to enter rigorous CTE programs of interest prior to high school. In another noteworthy practice, partnerships between K through 8 school districts and county vocational schools have been established during the transition year to explore new methods to give underserved students the academic preparation required to succeed in CTE. The reserve funds will support innovation in promising practices and models such as these that ramp up academic preparation for middle school students.

Foundational Elements and Goals

Two foundational elements and four goals were developed from the findings that emerged from engagement with stakeholders:

Foundational Elements

I. Equity of Opportunity and Access

The New Jersey Department of Education (NJDOE) will support the creation of expanded opportunities for each student to access quality career and technical education (CTE) programs, ensuring the equitable distribution of CTE programs throughout the state and the ability of all students to actively participate in those programs. Underserved populations are a critical focus and every effort must be made to reach, engage and serve these students more equitably. These strategic activities and supports will begin as early as middle school.

II. Partnerships

The NJDOE will support and incentivize the creation of transformational partnerships at the county-level that prepare New Jersey's future workforce. These partnerships will be developed organically through the findings from the Comprehensive Local Needs Assessment conducted at countywide meetings and include diverse education partners, industry and community-based organizations.

Goals

I. Quality Programs

The NJDOE will work to improve the quality of CTE preparation in an effort to support each student's skill development and more directly meet industry needs. The Comprehensive Local Needs Assessment (CLNA) process (and a reimagined definition of Programs of Study) will encourage LEAs to focus their funding efforts on only those programs that prepare students for the highest wage, in-demand occupations accessible at each educational attainment level.

II. Work-Based Learning

The NJDOE will ensure access to meaningful work-based learning opportunities for each CTE student. The selected quality performance indicator will be *% of Students Participating in Work-based Learning* and additional structures and supports must be developed to expand the number of students engaged in these experiences. This includes including elements of WBL coordinator training in teacher preparation programs. Data collection processes are currently being modified to improve data quality, including a tiered system of reporting the types of WBL experiences and student participation rates.

III. Career Advisement and Development

NJDOE will work closely with the New Jersey School Counselors Association to ensure each New Jersey counselor is better prepared to support students through ongoing career advisement and development. Support, guidance and resources will be crafted through collaboration.

IV. CTE Teacher Recruitment & Retention

NJDOE will continue to remove unnecessary code barriers and develop innovative, research-based strategies for strengthening the pipeline of CTE instructors to fill the educator positions, including those overseeing work-based learning. CTE Teacher Preparation Programs funded by the NJDOE will integrate curricular units or tracks on three areas of specialization for additional CTE endorsements: Special Education, English Language Learners and Work Based Learning.

The goals outlined by New Jersey's stakeholder engagement have illuminated a path to position CTE as the first and most critical educational component in meeting Governor Murphy's "stronger, fairer" vision for all New Jersey students.

Narrative Descriptions

Plan Development and Consultation

1. Describe how the State plan was developed in consultation with the stakeholders and in accordance with the procedures in section 122(c)(2) of Perkins V and as provided in Text Box 1 on the following page.

Building on the state's current education and workforce successes, the New Jersey Department of Education (NJDOE) gained critical state leadership support and engaged diverse stakeholders in the development of this plan. The integration of these factors resulted in the identification of key opportunities for transformational change. The expertise of representatives from state agencies and organizations was critical to this effort, as were the development of workgroups comprised of local representatives with direct knowledge of the current system structure and state leadership, including those responsible for state policy and program management. The creation of an extensive stakeholder engagement plan and the provision of online surveys and targeted marketing campaigns enabled the work to be shared with a wider audience and provided enhanced opportunity for public feedback and comment. Six Strategic Goals were crafted as a result of this process.

The strategic and state planning process for the development of the state plan:

- Engaged a wide variety of internal and external stakeholder groups;
- Helped build consensus toward the statewide vision for career and technical education (CTE); and
- Identified goals, key strategies and indicators for tracking progress towards the vision for CTE in New Jersey.

Stages of Work in the Development of the Perkins V State Plan for New Jersey

Discovery

The first part of our process included a landscape analysis of the current state of career and technical education (CTE) in New Jersey schools. During this **Discovery** phase, the Office of Career Readiness evaluated the current status of CTE programs throughout the state. The analysis determined where CTE is offered throughout the state and identified trends in the types and numbers of programs in every region and county. In addition, the analysis considered the types of programs that have the highest numbers of student enrollment and determined if subpopulations of students are represented more or less frequently in certain programs. A final step of the landscape analysis was completed with the support and data provided by labor market analyst partners at the New Jersey Department of Labor and Workforce Development (NJDOL). This analysis identified potential gaps or misalignments between labor market needs and CTE program offerings throughout the state and, more specifically, within each region.

Dialogue

All of the key findings from the landscape analysis were compiled and shared in series of regional presentations to our stakeholders during the next phase of the planning process. This second stage of our process, the **Dialogue** phase, included the presentation of our findings and careful gathering reactions and documenting input from our stakeholders. During the dialogue phase, we held six regional meetings throughout New Jersey in May and June 2019. Over 280 stakeholders, including representatives from business and industry, community organizations, workforce and economic development agencies and education (secondary and postsecondary) attended. The meeting objectives included sharing information on the strategic planning process, considering findings from our NJDOE/LWD landscape analysis, collecting feedback on how to improve the state CTE system and establishing mutually beneficial relationships with stakeholders for feedback on the strategic plan. The information gathered from these sessions was used to focus the goals and identify the priorities of the state plan.

Regional Stakeholder Symposia

Date	Location	Number of Attendees
5/31/2019	Rutgers University	47
6/3/2019	Stockton University	43
6/4/2019	Kean University	39
6/10/2019	William Paterson University	39
6/11/2019	Camden County College	56
6/12/2019	County College of Morris	48

The **Dialogue** phase continued in a series of events and processes to call attention to and raise awareness for the need for stakeholder input. Various methods of outreach communication were utilized to solicit ideas, input and information from stakeholders.

The NJDOE:

- Provided an informational webinar;
- Surveyed parents/families, students and business and industry professionals through an online platform;
- Held smaller, more personal focus group meetings with stakeholders such as, Department of Children and Families, Juvenile Justice Commission and Regional McKinney-Vento Coordinators and State Advisors of New Jersey Career and Technical Student Organizations; and
- Presented research findings and key decision points for feedback and guidance at several State Employment and Training Commission meetings, CTE Advisory Council meetings, CTE State Board Sub-Committee Meetings, New Jersey Council of County Vocational Technical Schools, New Jersey Council of County Colleges, ESSA Directors Meeting, New Jersey Association of Federal Program Administrators and Trenton Capital Partnership Meetings.

The NJDOE maintained attendance records and a spreadsheet of all participants at the meetings, focus groups and webinars. If a population was not fully represented, the Office of Career Readiness followed up through direct contact and scheduled a small group focus group session. The NJDOE took comprehensive measures to ensure all stakeholders had the opportunity to provide their input into the development of the Perkins V State Plan.

Students were a critical stakeholder group not represented in the initial series of forums. Therefore, an online survey customized for student respondents was created to solicit the input, ideas and perspectives from current middle, high school and community college students on key decision points to shape New Jersey's state plan. The online questions for the student survey were formulated to gather valued feedback relating to awareness of CTE and career pathway programs, program delivery, value of program outcomes, barriers that may exist for students in CTE programs, supports that students would benefit from in CTE programs, career advisement, middle school career awareness programs and work-based learning. The NJDOE received 8,833 online student survey submissions and approximately 100 students were interviewed in focus groups. The online survey and focus groups allowed us to reach students from all Perkins V special populations groups.

The in-person focus groups were held with diverse groups of career and technical education (CTE) and pre-CTE students from comprehensive high schools to gather information regarding their involvement and participation in CTE programs. The questions were slightly more targeted to address this unique population of students who had awareness and understanding of CTE programs, as they were currently enrolled in one or would be beginning a CTE program in the following months.

Parents and families were another group not well represented in the initial round of regional forums, so an online survey was designed to solicit their input, ideas and perspectives on CTE in New Jersey. The questions for the parent and family survey were formulated to gather valued feedback relating to awareness of CTE and career pathway programs, program delivery, value of program outcomes, barriers that may exist for students in CTE programs, supports that would benefit students in CTE programs, career advisement, middle school career awareness programs and work-based learning. The NJDOE received over 6,050 online parent and family responses. The variety of families that were reached through the online survey incorporated perspectives from all Perkins V special populations groups.

Businesses also completed an online survey. The respondents were primarily representatives of small businesses and the primary trend that emerged was the need for partnerships and connections to be made with local area schools. The respondents overwhelmingly expressed interest in supporting students in exploring careers, but mentioned barriers existing as to who they might contact within a school to begin to collaborate, how to find time to build connections and coordinate schedules for collaboration and, if the relationship was established, transportation for those students interested in work-based learning experiences. All respondents agreed that work-based learning was the most critical work-readiness experience for students, corroborating the parent, student and community views on the use of work-based learning as the selected performance indicator.

The information gathered from stakeholders during the **Dialogue** phase was used to develop the goals and identify the priorities of New Jersey's Perkins V State Plan. The findings were synthesized into a series of clear and coherent goals to be addressed, with key strategies and indicators of progress aligned to each goal. These findings from stakeholder outreach strongly guided the key **Decisions** made by the NJDOE in the development of this state plan.

2. Consistent with section 122(e)(1) of Perkins V, each eligible agency must develop the portion of the State plan relating to the amount and uses of any funds proposed to be reserved for adult career and technical education, postsecondary career and technical education, and secondary career and technical education after consultation with the State agencies identified in section 122(e)(1)(A)-(C) of the Act. If a State agency, other than the eligible agency, finds a portion of the final State plan objectionable, the eligible agency must provide a copy of such objections and a description of its response in the final plan submitted to the Secretary. (Section 122(e)(2) of Perkins V)

In continuing current practice, New Jersey Department of Education (NJDOE) will distribute 85 percent of the state's federal Perkins allocation to eligible recipients. From this 85 percent of funds, 15 percent will be awarded to eligible recipients through reserve funds through the provision in Section 112(c) of the Perkins Act as follows:

- Five and a half percent to be used to support secondary programs in county vocational school districts that serve high percentages and high numbers of career and technical education (CTE) participants and CTE concentrators;
- Two percent to be used to support secondary programs in areas designated as rural; and
- Seven and a half percent will be used to fund competitive innovation grants supporting partnerships that will increase access to CTE for underserved populations in each county.

During the 2019-2020 transition year and in collaboration with stakeholders, the NJDOE examined the use of reserve funds and established that the reserve allocation should increase to include areas with disparities or gaps in subpopulation participation and performance. NJDOE questioned stakeholders regarding the use of reserve funds to foster innovation through the identification and promotion of promising and proven CTE programs, practices and strategies. The competitive innovation reserve (7.5%) will be open to all LEAs (including those whose minimum allocation falls below the threshold but are willing to form a consortium) and requires all applicants to partner and design unique solutions to increasing CTE access at the county level.

Regarding the other seven and a half percent, the rural reserve (2%) allows rural districts, whose allocations would be too small to provide effective CTE programs, to provide high-quality CTE programs to their students. The county vocational school district reserve (5.5%) allows those districts that have a high percentage and high numbers of CTE participants and CTE concentrators to offer high-quality opportunities to those students.

The remainder of the 85% will be divided, with 55% being allocated to secondary districts and 45% allocated to postsecondary institutions.

The split of funds between the secondary (55%) and postsecondary (45%) levels includes a slightly higher percentage of funding to secondary schools, particularly as it compares to enrollment. The reason for this is that the secondary schools are forming the foundational base for postsecondary education and generating the interest in career pathways that students will be able to carry forward whether they continue to a four-year degree, a two-year degree, the military, apprenticeship or directly into the workforce. In addition, because each stakeholder group strongly supported the use of Perkins funding for middle school projects and programs, it was determined that secondary districts are better poised to support that population of students.

Administration and Leadership Funds

NJDOE allots five percent for state administration and ten percent for state leadership activities. The majority of the state administration fund is spent on staff salaries, fringe benefits, travel and direct and indirect costs.

The following will be funded out of the state leadership allocation:

- State agencies will be funded at one percent of the full grant award as required in the legislation.
- Nontraditional training activities will be funded between $60,000 and $150,000
- The set-aside for recruiting special populations will be funded at one percent of the state leadership allocation
- The Certificate of Eligibility Educator Preparation Program was developed to assist with the improvement of preparation of individuals entering the secondary CTE teaching profession through New Jersey's alternate route teacher program. The goal is to increase CTE teacher recruitment and retention rates.
- Expanding Pre-Apprenticeship in a New Direction (ExPAND) Pre-Apprenticeship Grant. This grant intended to increase the number of high school students, who are at least 16 years old, participating in and completing pre-apprenticeship programs that are aligned to a Registered Apprenticeship occupation recognized by the U.S. Department of Labor and that is a NJ industry of focus as identified by the New Jersey Department of Labor and Workforce development.
- State agency memberships to national organizations in support of CTE.
- The remaining funds are used for salaries, fringe benefits, travel and direct and indirect costs of NJDOE supporting the above activities.

Consortia

To apply for Perkins funding, in accordance with Section 122(d)(8) of Perkins V, New Jersey will ensure that eligible secondary institutions receive a minimum gross allocation of $15,000 and eligible postsecondary institutions receive a minimum allocation of $50,000. If the recipient's allocation would be less than either of these amounts, depending on the type of institution, the NJDOE will notify the recipient that it may:

- Enter into a consortium with one or more recipients for the purpose of providing enhanced services and to meet the minimum grant requirement; or
- Form a consortium with a county vocational school district offering programs that meet the requirements of the act and transfer such allocation to the county vocational school district.

Members of a consortium will combine their individual "gross" allocations to form the funding pool for the consortium to meet the threshold allocation amount. The NJDOE will ensure, through direct communication and technical assistance with local eligible recipients that funds allocated to a consortium are used only for purposes and programs that are mutually beneficial to all members of the consortium and that are authorized under this title.

Districts in New Jersey who do not meet the minimum threshold to receive an allocation but are otherwise interested in offering CTE programs are still able to do so by forming a consortium. This

allows districts to make sure that students in their districts, who would not otherwise have access to programs that prepare them with the skills needed in the workplace, can participate in high-quality CTE programs where they might not otherwise be able to do so. The ability to form a consortium and combine individual "gross" allocations allows districts the ability to exercise local control over the configuration of CTE delivery in their region so that they can offer students the types of career pathways program that are important in that region. This partnership is strongly encouraged through the competitive innovation opportunity offered through reserve funds.

3. Describe opportunities for the public to comment in person and in writing on the State plan. (Section 122(d)(14) of Perkins V)

Public Notice was posted in advance of the November 6 state board meeting via the New Jersey Register:

Take notice that pursuant to the *Strengthening Career and Technical Education for the 21st Century Act*, Section 122 (a)4, the New Jersey Department of Education (NJDOE) will be presenting its proposed Perkins V State Plan to the New Jersey State Board of Education (NJSBOE) at its November 6, 2019 monthly public business meeting at 10 a.m. in the First Floor Conference Room at the NJDOE Building, 100 Riverview Plaza, Trenton, NJ 08625.

The Department will accept public comment on the proposed Perkins V State Plan beginning November 6, 2019 through December 31, 2019. Comments may be submitted electronically to the Perkins V email address, PerkinsV@doe.nj.gov or, members of the public may register to speak before the NJSBOE following its monthly public business meeting on December 4, 2019 at the NJDOE Building, 100 Riverview Plaza, Trenton, NJ 08625, at 2 p.m.

New Jersey's proposed Perkins V State Plan will be electronically published on the NJDOE, career and technical education (CTE) webpage. In addition, this notice will be published on the NJDOE webpage.

If you have any questions regarding the Perkins V State Plan, please call the Office of Career Readiness at 609-376-9067 or email PerkinsV@doe.nj.gov. If you have questions regarding speaking before the State Board of Education on the draft Perkins V plan, please contact the NJ State Board Office at 609-376-9071.

Schedule of Public Forums

Name of Venue	Location	Date
Southern Regional Institute and Educational Technology Training Center	Galloway, NJ	December 2, 2019
New Jersey State Board of Education Meeting	Trenton, NJ	December 4, 2019
Bergen County Community College, Meadowlands	Lyndhurst, NJ	December 6, 2019

Program Administration and Implementation

1. State's Vision for Education and Workforce Development

a. Provide a summary of State-supported workforce development activities (including education and training) in the State, including the degree to which the State's career and technical education programs and programs of study are aligned with and address the education and skill needs of the employers in the State identified by the State workforce development board. (Section 122(d)(1) of Perkins V)

Over the past several years, New Jersey has celebrated major advancements in aligning workforce development activities through partnership with several state agencies: New Jersey Department of Education (NJDOE), New Jersey Department of Labor and Workforce Development (NJDOL), Office of the Secretary of Higher Education (OSHE), State Employment and Training Commission (SETC), Department of Community Affairs (DCA), in conjunction with the Business Action Center, the Economic Development Authority and the Office of the Governor. The synergy between these agencies and groups is dynamic and collaborative and the substantive discussions have led to clear plans to collectively support a transformed environment. The outcomes of this effort have been focused on three core elements: developing high-quality, employer-valued partnerships, incorporating career pathways into education and training programs; and increasing the number of adults with a postsecondary, industry-valued degree or credential.

By focusing on these elements, NJDOL identified nine key industry clusters in New Jersey: Construction and Energy; Finance; Health Care; Leisure and Hospitality; Life Sciences; Manufacturing; Retail Trade; Technology; and Transportation, Logistics and Distribution. Corresponding sector partnerships (New Generation Industry Partnerships) were established to facilitate public-private collaborations to meet workforce and economic challenges. They serve as strategic partnerships among business leaders, public partners and community leaders, working together to develop solutions tailored to the specific, expressed needs of the industry sector. They bring together industry leaders to develop solutions to common workforce need and other challenges and are engaged in identifying skills gaps, networking with partners, assisting in designing curriculum/training to meet the needs of the industry sector, cultivating skilled labor pools and building career awareness. The NJDOE eagerly accepted the opportunity to partner, as the reauthorization of the Carl D. Perkins Career and Technical Education Act was a strong catalyst for our active participation in firmly connecting our state's education and workforce development systems.

One of the smaller working groups that arose from these Industry Partnerships is a Credential Review Board. This partnership product is both significant and timely in that it provides a process for evaluating specific credentials based on employers' recommendations. This will allow the NJDOE to expand its current definition of a career and technical education (CTE) program of study to allow for industry-valued credentials. The Credential Review Board is focusing their analysis on those credentials that secondary-aged students would be eligible to obtain.

As mentioned above, NJDOL and NJDOE have had a long-standing partnership in working towards the development of demand-driven quality CTE programs. Over the past decade NJDOL has identified key industry sectors and provided NJDOE with the most current labor market data to inform secondary and postsecondary program development and revision. Despite the fact that the data provided by the NJDOL was comprehensive and timely, a disconnect remained for the NJDOE in translating the industry sector data to the classification of instructional programs (CIP) Codes as defined by the National Center for Educational Statistics (NCES) and used in the Career Clusters® framework. While

the labor market information reflected New Jersey's current workforce state, the NJDOE was not always able to translate that information directly into specific CTE programs.

Fortunately, another strong partnership exists between NJDOE, NJDOL and the John J. Heldrich Center for Workforce Development at Rutgers, The State University of New Jersey. The Heldrich Center conducts extensive research on career preparation program effectiveness and labor market outcomes. In 2016, the NJDOE contracted with the Heldrich Center to align New Jersey's framework for the organization of CTE programs to the state's key industry sectors through a novel methodology developed by the Heldrich Center for this purpose. The results of this comprehensive analysis are now informing the development of our Perkins V state plan to foster increased alignment between CTE programs and the state's key industry sectors.

Using this same methodology, the NJDOE will now be able to align the Industry-Valued Credential List produced by NJDOL to the respective CTE programs by CIP code. This provides the basis for NJDOE to expand the current program of study definition to include the attainment of these industry-valued credentials as a qualifier for a rigorous program of study. Broadening this definition would be a significant step in modifying the concept of quality CTE programs of study in our state, which currently require articulation to a two-, or four- year college program. This is a fundamental shift that will open the door for more CTE programs to be directly aligned to a vetted list of valued credentials and provide viable and rigorous options for students in a career pathway system. The goal is to ultimately include the attainment of industry-valued credentials in the state's accountability system, thereby giving prominence to these credentials as a measure of readiness for college and the 21st century world of work.

Regarding the support and oversight of work-based learning experiences (previously referred to as Structured Learning Experiences or SLEs), representatives from the Office of Career Readiness participate in the New Jersey Interagency Alliance, which is a strong collaborative effort among state and federal agencies. Partners of the Alliance include the U.S. Department of Labor, Wage and Hour Division; the NJDOE; the NJ Department of Labor and Workforce Development; the University of Medicine and Dentistry of NJ (UMDNJ); and the Environmental and Occupational Health Sciences Institute, a joint institute of the UMDNJ–Robert Wood Johnson Medical School and Rutgers University. This alliance was originally founded in 1992 and was based on jointly providing formal work-based trainings to stakeholders around the state. This unique union of federal and state agencies provides a streamlined and highly informed collaborative which reflects the complicated nature of ensuring student safety in the workplace. The contributions of all partners reflect the most current understandings of labor and workforce needs, public health policy and concerns around children in hazardous and non-hazardous work settings and the educational supports and supervisory role in ensuring a safe and productive experience for students.

Lastly, education and workforce collaboration were leveraged in the development of the Workforce Innovation and Opportunity Act (WIOA) State Plan. DOE and OSHE served on workgroups charged with developing recommendations for WIOA statewide implementation including governance and planning, One-Stop services, services to individuals with disabilities, career pathways, youth services and performance. These cross-sector partnerships are also evident in the SETC Shared Youth Vision Council, charged with assisting the state's neediest youth to successfully transition into the labor market and obtain the skills necessary to become productive members of their communities.

The mission of the Shared Youth Vision Council is to help New Jersey develop a comprehensive strategy that will connect state agencies, secondary education, community organizations, workforce development programs and other stakeholders to assist youth to successfully navigate the labor market and to obtain the skills they need for employment. In order to carry out this work, the Council

develops policies and program strategies that focus on building capacity between youth stakeholders, career awareness efforts and innovative programs that create pathways to employment. The Shared Youth Vision Council served as an important stakeholder group and provided input into this state plan.

b. Describe the State's strategic vision and set of goals for preparing an educated and skilled workforce (including special populations) and for meeting the skilled workforce needs of employers, including in existing and emerging in-demand industry sectors and occupations as identified by the State, and how the State's career and technical education programs will help to meet these goals. (Section 122(d)(2) of Perkins V)

New Jersey's strategic talent development strategy was defined in the 2018 Modification of the Combined State Plan for the Workforce Innovation and Opportunity Act. *The Mission of New Jersey's Talent Development Strategy: New Jersey will increase the number of residents with an industry-valued credential or degree through high quality partnerships and integrated investments.*

The state's talent development strategy is focused on two foundational goals:

1) Building an Innovative, Skilled Workforce to Power Economic Growth
2) Building Economic Opportunity for all New Jersey Residents

Goal 1*:* Building an Innovative, Skilled Workforce to Power Economic Growth

Innovation has been a hallmark of New Jersey's growth and prosperity. Maintaining that competitive edge in the 21st Century requires a knowledge-based economy supported by a highly skilled workforce and a state-of the art talent development strategy to guide its training and education system. For more than 200 years, New Jersey's skilled workforce has helped its employers convert technological breakthroughs into world-class industries such as life sciences, health care and medical devices, communications, advanced manufacturing and financial services.

Today New Jersey ranks among "Top 10" states for workforce education, patents, investment in research and development and employment of scientists and engineers. Past performance, however, is no guarantee of future economic success. As the economy continues to grow, New Jersey must keep pace with global trends that are boosting demand for workers with postsecondary degrees and other credentials valued by employers. Fast-changing technology and rising international competition are challenges to educators, employers, government and community groups alike; together all stakeholders must find ways to meet the essential skills, needs of employers and ensure that members of the workforce are not left behind.

Businesses in New Jersey and around the country have identified a growing gap between the skills they require on the job and the skills currently available from their traditional pools of talent. The National Governors Association found a serious mismatch in the state between future job requirements and the level of credentials and knowledge held by the workforce. Forty percent of today's workers over age 25 have an associate degree or higher. Within 15 years, 55% of all jobs in New Jersey are expected to require a postsecondary degree. A greater percentage will require a post-secondary, industry-valued credential. Employers in nearly all industries report difficulty finding qualified workers for currently open positions. A New Jersey Business & Industry Association survey of manufacturers found that: more than 70% reported difficulty filling key positions with workers who had the necessary skills; 74% said those skills gaps made it difficult to maintain production levels consistent with customer demand; and 51% reported the mismatch led to slower delivery of their product to market.

Clearly, the ability to recruit talent with specialized expertise is becoming a critical factor for businesses when deciding where to invest future resources. A well-defined Talent Development Strategy is therefore essential to sustaining New Jersey's traditional advantages in attracting and

retaining competitive, high-wage employment. Recent passage of the new federal Workforce Innovation and Opportunity Act (WIOA) is an important catalyst for change that could encourage a wide range of stakeholders to collaborate on the important effort of building a skilled workforce to drive our economy.

Goal 2: Building Economic Opportunity for all New Jersey Residents

In a rapidly changing, global economy, every New Jersey resident will need to develop skills, abilities and connections in order to obtain a job and to have a successful career. Given the increasing skill needs of employers in all industries, New Jersey residents must have basic skills, employability skills and basic computer abilities. While a high school diploma is critical for labor market success, a postsecondary industry-valued credential or degree is necessary for the vast majority of jobs that pay a family-supporting wage. In an ever-changing labor market, all New Jersey residents will need to be able to plan and manage their careers. They will need to be able to upgrade their skills throughout their career and to follow career pathways to new opportunities. Efforts to build new career pathways and to help individuals obtain basic skills and industry-valued postsecondary credentials and degrees, are critical to the economic future of out-of-school youth, people with disabilities, those with low literacy skills, individuals receiving public assistance and other social services, homeless individuals, veterans and dislocated workers. These efforts must also ensure that women have equitable access to education and training opportunities, enabling the pursuit of careers in any and all occupations, including non- traditional ones. A well-defined Talent Development Strategy is therefore essential in sustaining New Jersey's efforts to help all residents secure a sustainable career.

To more fully understand the needs of New Jersey residents, in 2017, the SETC in partnership with LWD and the John J. Heldrich Center for Workforce Development, implemented a dashboard to display high-level performance data in order to support evidence-based policy decisions. The dashboard enables Commission members to better understand the scope of state programs and their related populations. The dashboard helps the Commission explore data trends, highlight potential program issues and coordinate with other state agencies like the New Jersey Department of Education (NJDOE) to advance the workforce needs of New Jersey. The dashboard is publicly available on the SETC website.

The NJDOE recognizes the critical role it can serve for all New Jersey students as an access point into the talent pipeline. The mission *of increasing the number of residents with an industry-valued credential or degree* begins with a K-12 education and the partnerships the agency builds and the investments made to serve these goals are crucial to reaching the vision of talent development for our state. As mentioned in B.1.a, the establishment of partnerships across state agencies is strategic and streamlined and the NJDOE is highly responsive to the guidance and support it receives from partners. The efforts described above in B.1.a have and will continue to shape career readiness in the K-12 educational system, culminating in high-quality secondary and postsecondary CTE programs as well as work-based learning opportunities available to all students.

c. Describe the State's strategy for any joint planning, alignment, coordination, and leveraging of funds between the State's career and technical education programs and programs of study with the State's workforce development system, to achieve the strategic vision and goals described in section 122(d)(2) of Perkins V, including the core programs defined in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102) and the elements related to system alignment under section 102(b)(2)(B) of such Act (29 U.S.C. 3112(b)(2)(B)); and for programs carried out under this title with other Federal programs, which may include programs funded under the Elementary and Secondary Education Act of 1965 and the Higher Education Act of 1965. (Section 122(d)(3) of Perkins V)

In March 2018, to support the vision of a stronger, fairer economy, Governor Murphy announced plans to create the New Jersey Apprenticeship Network (NJNAN). This initiative synthesizing New Jersey Department of Labor and Workforce Development (NJDOL), New Jersey Department of Education (NJDOE) and Office of the Secretary of Higher Education (OSHE), supports increasing opportunities for both youth and adults in New Jersey to enter high-skilled careers through paid apprenticeships that often include college credit. In partnership with the U.S. Department of Labor, the NJDOL's new Office of Apprenticeship is focused on creating apprenticeship opportunities in high-growth sectors such as advanced manufacturing, renewable energy, information technology, health care, life sciences and more. The NJDOE works collaboratively with NJDOL through NJNAN in the development of grant opportunities and new programs.

In the fall of 2018, NJDOL announced the release of the $4.5 million Growing Apprenticeship in Nontraditional Sectors (GAINS) grant. The goals of the grant are to: increase the number of Registered Apprenticeship Programs in New Jersey; increase the number of apprentices; assist small businesses in developing effective apprenticeship programs; provide trainings that lead to credentials, licenses and/or college credits; increase worker productivity and retention; and develop a workforce with the skills and qualifications demanded by the state's high-growth industries. This grant will provide the on-ramps to registered apprenticeship programs for students.

In addition to the GAINS grant, which will create apprenticeship opportunities primarily for adults, NJDOL announced a $3 million Pre-Apprenticeship in Career Education (PACE) Grant. The purpose of the PACE Program is to prepare individuals to enter and succeed in Registered Apprenticeship programs. These pre-apprenticeship programs have a documented partnership with at least one Registered Apprenticeship program sponsor and together they expand the participant's career pathway opportunities with industry-based training coupled with classroom instruction. The program will drive economic development through skills and educational attainment and create pathways to advanced credentials and better-paying careers.

In August of 2019, The Expanding Pre-Apprenticeship in a New Direction (ExPAND) grant was announced to all LEAs. The $600,000 grant is intended to increase the number of high school students (at least 16 years old) participating in and completing pre-apprenticeship programs that are aligned to a Registered Apprenticeship occupation recognized by the U.S. Department of Labor as well as a NJ industry of focus as identified by the NJDOL. This grant program is open to all LEAs that are currently operating an approved career and technical education (CTE) program or partnership of study. Funding for this grant program is provided from federal Perkins Leadership funds. Six awards will be regionally distributed; they will be made to the top scoring comprehensive high school or charter school and county vocational school applicants in each of the three regions (north, central and south). The first project period begins February 1, 2020 and runs through June 30, 2021.

The NJDOL Office of Apprenticeship and the United States Department of Labor's New Jersey Office of Apprenticeship have partnered to offer two grants to support apprenticeship programs for students. One grant is being offered in allied health certificate programs and the other is available to those in advanced manufacturing programs. These Scaling Apprenticeship Through Sector-Based Strategies grants, totaling $16 million, are currently providing apprenticeships for more than 6,600 individuals and will serve to expand New Jersey community colleges' efforts to build career pathways that are driven by the needs of the state's key industries. Apprenticeship programs combine classroom education and training with work experience and are developed and implemented in close partnership with employers.

The first grant, totaling $12 million, was awarded to a consortium of 15 community colleges in New Jersey that will receive funding to support students in Allied Health certificate programs offering apprenticeship opportunities and pathways to academic credit. The programs offered include Medical Assistant, Medical Billing and Coding, Pharmacy Technician, Certified Nursing Assistant, Community Health Worker, Phlebotomy, EKG and Patient Care Technician. Partners include CVS Health; RWJ Barnabas Health System and five other healthcare entities; the NJ Health Care Industry Association, representing long-term care facilities; District Council Local 1199J health care union; NJ Department of Labor and Workforce Development; New Jersey Workforce Development Boards; Garden State Employment and Training Association; and the New Jersey Council of County Colleges.

This health grant will allow new students to attend for free (or minimal cost), depending on their income; transportation and childcare costs may also be covered. A grant-funded success coach will work directly with participants. Participants will also receive a stipend for their apprenticeships and earn college credit.

The second grant, the Advanced Manufacturing Apprenticeship Grant was awarded to a consortium of eight New Jersey community colleges. Partners include the German American Chamber of Commerce, Siemens, UPS and five advanced manufacturing firms. In addition to support for apprenticeship opportunities in credit programs, there is funding made available for the development of certificate programs leading to apprenticeship opportunities including Electro-Mechanical Technician, Certified Production Technician and Supply Chain Management/Logistics.

These grants serve as a cornerstone for broader efforts in New Jersey's community colleges to build Career and Credential Pathway Collaboratives in the health care and advanced manufacturing industries. These collaboratives will bring community colleges, employers, high schools, colleges and universities, labor unions, workforce agencies and other partners together to identify the common needs of employers, map existing programs and pathways and build new pathways in response to industry needs. Each collaborative will coordinate closely with state government agencies and work closely with the New Jersey Apprenticeship Network, ensuring that work and learn models are incorporated into pathways.

To align processes and better support students in apprenticeship opportunities, the NJDOE and the Employment and Training Agency (ETA) of the United States Department of Labor are in the process of establishing a management agreement to gain access to specific data sets from the Registered Apprenticeship Partners Information Data System (RAPIDS 2.0). The NJDOE will use the information to match high school graduates' student record data maintained at the NJDOE to registered apprenticeships so that apprenticeship can be reported on the annual New Jersey School Performance Report as a positive outcome. In addition, NJDOE intends to use the information to measure outcomes of apprenticeship-focused projects such as the pre-apprenticeship grant that aims to increase the number of high school students, who are at least 16 years old, participating in and completing pre-apprenticeship programs that are aligned to a registered apprenticeship occupation recognized by the

USDOL. Aligning and comparing data sets will allow the NJDOE to conduct analyses and demonstrate impact of participation for students engaged in apprenticeship opportunities.

Through these collaborative efforts, it is clear New Jersey is committed to supporting the creation of pre- and apprenticeship programs that align to New Jersey's in-demand industries. Through these grants NJDOE and our partners will be able to research promising practices in the development of apprenticeships in New Jersey. This opportunity will lay the foundation for a multi-year effort to support apprenticeship and workforce development in collaboration with partners at NJDOL. The NJDOE believes that all students in New Jersey should have access to engage in work outside of the classroom related to their field of study and apprenticeships give students meaningful exposure to build skills that prepare them for success after graduation. Students, employers and the state economy will benefit from this suite of innovative collaborations.

New Jersey is proud to have a constituent base that values, prioritizes and supports public education. In November 2018, New Jersey voters approved the *Securing Our Children's Future Bond Act* authorizing $500 million in state bonds to expand CTE programs, enhance K-12 school security and repair contaminated school drinking water systems. $275 million has been allocated for use by county vocational school districts to fund school facilities construction projects that support CTE program expansion in accordance with labor market demands and economic development goals. Proposed projects must increase the number of students in CTE programs and academic opportunity by expanding or offering new career and technical programs. The new student seats are in CTE programs that prepare students for high demand, technically skilled careers in accordance with demonstrated county needs, aligned with labor market demands or economic development goals, in key industry clusters: Bio/pharmaceuticals and life sciences; Transportation, distribution and logistics; Finance and insurance; Advanced manufacturing; Health care; Leisure and hospitality; Retail; Technology; and Construction, utilities and energy. Projects will receive priority for CTE grant funding if they offer stackable credentials, partner across secondary and postsecondary systems or partner with employers to train current or potential employees.

d. Describe how the eligible agency will use State leadership funds made available under section 112(a)(2) of the Act for purposes under section 124 of the Act. (Section 122(d)(7) of Perkins V)

The following will be funded out of the State Leadership allocation:

- New Jersey state agencies are funded as required by the Perkins V legislation. One percent of the state leadership funds are used to fund state institutions. In New Jersey these institutions include the Department of Corrections, Department of Children and Families and the Juvenile Justice Commission.
- Nontraditional training activities are overseen by New Jersey Department of Education (NJDOE) personnel. The NJDOE holds a Memorandum of Understanding with Rutgers University to collaborate with our office to help provide professional development and technical assistance to secondary and postsecondary schools to increase the recruitment, participation and retention of special population students in high-quality CTE programs.
- A required set-aside of approximately $2,542 for recruiting special populations.
- Office of Career Readiness staff salaries, travel and miscellaneous expenditures.
- New Jersey Career Assistance Navigator (NJCAN). NJCAN is used to assist school districts with complying with the New Jersey Student Learning Standards, Standard 9, 21st Century Life and Careers.
- Expanding Pre-Apprenticeship in a New Direction (ExPAND) Pre-Apprenticeship Grant. This grant intended to increase the number of high school students, who are at least 16 years old, participating in and completing pre-apprenticeship programs that are aligned to a Registered Apprenticeship occupation recognized by the U.S. Department of Labor and that is a NJ industry of focus as identified by the New Jersey Department of Labor and Workforce development.
- The Certificate of Eligibility Educator Preparation Program was developed to assist with the improvement of preparation of individuals entering the secondary CTE teaching profession through New Jersey's alternate route teacher program. The goal is to increase CTE teacher recruitment and retention rates.
- State agency memberships to national organizations in support of CTE (Advance CTE, Council of Chief State School Officers, National Alliance for Partners in Equity).

2. Implementing Career and Technical Education Programs and Programs of Study

a. Describe the career and technical education programs or programs of study that will be supported, developed, or improved at the State level, including descriptions of the programs of study to be developed at the State level and made available for adoption by eligible recipients. (Section 122(d)(4)(A) of Perkins V)

In preparation for revising New Jersey's definition of a high-quality career and technical education (CTE) program, the Office of Career Readiness conducted a landscape research analysis of state and national policies as well as peer-reviewed literature to determine the optimal indicators of quality. Our office examined the limited body of quantitative research on the impact of CTE programs, the extensive qualitative reports of CTE program impact, the assorted frameworks developed by national education and workforce organizations, other state education agencies' quality guidelines for CTE programs, as well as national and state legislation focused on CTE.

A huge body of research exists to support that CTE engages and motivates students. CTE programs are highly regarded as an important tool for engaging students and produce outcomes that include preparation for the world of work. Irrespective of the specific CTE program under review, most studies concur that an effective, high-quality program must be premised upon authentic industry needs and the curriculum must satisfy the broader educational needs of workers, including specific industry content components and the soft skills employers highlight (Field et al, 2010; Castellano et al, 2014).

Beyond the obvious research-based recommendation that districts increase the number of CTE programs offered to serve all students, two other significant recommendations emerged from the New Jersey Department of Education's (NJDOE) literature review. The first recommendation suggests districts offer CTE primarily, if not exclusively, through program of study sequences, as the findings indicate they are significantly more impactful on student outcomes than simply taking one or few CTE courses alone and not terminating in either a certificate, credential or degree of value (Castellano et al, 2014; Castellano et al, 2005). Secondly, studies suggest that states should consider redesigning credit-based transfer programs around modularized, career-focused certification, credential and associate degree programs for students interested in less than a baccalaureate degree (Walker and Farmer, 2018; Castellano et al, 2014). Both of these findings correlate with the vision for Perkins V established through legislation and New Jersey is prepared to respond with a revised definition of program of study with this research in mind.

As we redefine our vision of size, scope and quality of CTE programs/programs of study eligible for funding, the findings from our literature review and the guidance of our partners (discussed in B.1.a) was weighted heavily. The NJDOE is committed to developing and improving career pathways programs at the state level that support the in-demand industry sectors identified by the New Jersey Department of Labor and Workforce Development (NJDOL) in the Combined State Plan for the Workforce Innovation and Opportunity (WIOA) Act 2018 Modification and updated in the NJDOL list of Industry Partnerships in 2019. Those areas include Construction & Energy; Finance; Health Care; Leisure and Hospitality; Life Science; Manufacturing; Retail Trade; Technology; and Transportation, Distribution & Logistics.

These industry clusters make up 74% of all private sector employment in New Jersey. NJDOE has demonstrated a history of commitment to engaging institutions of higher education in creating career pathways programs in several of these in-demand industries and will continue to engage partners to

create additional model programming in these sectors. The benefit of working with postsecondary partners is that the model pathways begin in high school and seamlessly connect to a postsecondary program.

An example of the success celebrated by the NJDOE in partnership with higher education is the Health Science Careers program. Over the past several decades, the number of Health Science programs of study in New Jersey has expanded due to a robust partnership between the NJDOE and the School of Health Professions at Rutgers, The State University of New Jersey (Rutgers University). Originating with a pilot program launched in 1992 with three high schools and 12 students, this Health Science Careers Program has grown to serve more than 4,700 students in 68 high schools during the 2018-19 school year. The goal of this program is to assist in achieving the workforce needs of the health care industry in New Jersey by providing high school students with high-quality courses to prepare them for health careers as well as an opportunity to earn college credit and clinical experience.

With funding from the NJDOE, the program has flourished and grown to include the development of online courses to enhance accessibility for urban and rural districts. Ten courses, including Dynamics of Health Care in Society, Anatomy and Physiology and Emergency and Clinical Care, are available. More than 65 colleges in New Jersey and other states offer college credit to students who successfully complete one or more of these courses and the corresponding end of program tests. The NJDOE will continue to support and develop the Health Sciences Careers program in partnership with Rutgers University. Through this partnership, NJDOE will fund curriculum updates and course expansions for this program to make sure it remains timely and relevant to the ever-changing nature of health care.

Another successful partnership with Rutgers University resulted in the development of a four-year curriculum to support career pathways programs in Supply Chain Management (SCM). This program provides students with the opportunity to learn high-demand skills that can lead to multiple opportunities after high school. During the 2017-2018 school year, five New Jersey high schools continued teaching the GLSCM curriculum and eleven schools adopted the program to begin in 2018-2019. There are currently 19 schools teaching the GLSCM program and to-date, there are eight more who will be implementing the program in the 2020-2021 school year. Interest in the program is growing throughout New Jersey and the NJDOE is committed to partnering with the School of Business at Rutgers University to expand the opportunities that are available to students through this program of study. A statewide articulation agreement for the curriculum has already been established.

Through this curriculum and professional development project, intensive summer training is provided each summer for teachers on the campus of Rutgers University in the following areas: project-based learning; supply chain management; integrated literacy and math; and instructional strategies for special populations. The training provides ongoing professional development for teachers already using the curriculum and also provides initial training to teachers from districts that are beginning to offer the curriculum.

NJDOE will expand this model of working with institutions of higher education to create career pathways programs and support districts' ability to offer high-quality programs of study that seamlessly connect high school to postsecondary programs. The NJDOE will begin the development of model programs of study in other in-demand industries, such as Computer Science and Information Technology, to support the Governor's initiative to increase access to STEM and Computer Science curriculum and prepare students for in-demand industries. This work will support the Governor's "Computer Science for All" initiative. In 2019, Governor Murphy spoke about the state's deep shortage of computer science skills, citing a 2015 report by Code.org that found 23,000 open positions in

computer science jobs and just 1,100 new graduates in the field. NJDOE will begin the development of model curricula for programs in Computer Science and Information Technology.

NJDOE has not limited curriculum development work to postsecondary institutions. Great success was met working with districts in developing model curricula in the key industry areas. In 2016, New Jersey introduced the *Building Capacity for Career Pathways: A Pilot Program for Comprehensive High Schools*. It is a state-funded pilot program intended to expand the number of Career Pathways for students in grades 9-12 in comprehensive school districts, regional high school districts and charter schools. Districts are required to leverage the expertise of a talent network (an earlier iteration of the Industry Sector Partnerships, established by the NJ Department of Labor and Workforce Development); business and industry partners and postsecondary institutions. The program focuses on preparing students for careers in high labor market demand occupations that provide family sustaining wages. During the first year, the grantees concentrated on an intensive capacity-building period of professional development utilizing a career pathway framework. In the following four years of the pilot, grantees implement, support and evaluate the career pathways realized through high quality CTE programs of study. From 2016-2018 the program has enrolled 1,560 CTE students across 13 programs. The participating districts will serve as leaders supporting the expansion of CTE offerings within comprehensive schools.

In addition to these programs of study that follow the standard three course sequence to be completed over several years and leading to postsecondary schooling, the NJDOE will also support the pilot of model programs for career-focused certification or credential programs for students interested in directly entering careers within these key sectors. These programs may provide more flexible options for underserved students, as the commitment to two or three-year programs left certain special populations at higher risk of not completing the sequence of courses and/or obtaining appropriate postsecondary credentials. The NJDOE is working with the New Jersey Juvenile Justice Commission, the New Jersey Department of Children and Families and with internal NJDOE colleagues in the Bureau of Bilingual Education to determine how to best serve students with higher mobility rates, which include incarcerated, foster and migrant student populations. This need for programs using a limited duration structure was illuminated exclusively through our stakeholder engagement process and began the conversations as to how the NJDOE can best serve these students in their career pathways.

Innovation Inspiration:
Heavy Duty Equipment Technology Case Study

A serendipitous phone call from Greg Blaszka, the Chief Financial Officer of JESCO, sparked the inspiration to create a new program of study in New Jersey. He wasn't sure whom at the New Jersey Department of Education (NJDOE) he wanted to speak to, but he had an idea to partner with the NJDOE and somehow build the pipeline of heavy-duty equipment technologists in New Jersey straight from high school. In anticipation of the passing of a federal two trillion-dollar bipartisan infrastructure bill, Mr. Blaszka expressed deep concern that our state would not have the capacity to leverage the funds. Some estimates suggest that a $1 trillion injection of federal funding could spur 11 million U.S. jobs, and New Jersey is currently experiencing a shortage of operators and technicians, who would comprise a large portion of this needed workforce. This stark realization highlights the fact that our supply of qualified professionals could significantly limit our ability to leverage this incredible opportunity and transform the state's infrastructure system beyond the status quo.

The Office of Career Readiness responded with urgency. The opportunity to develop programs in Heavy Duty Equipment Technology, Diesel Mechanics and Welding have existed for some time as eligible CIP codes; however, the expansion of each of these programs are limited greatly by shop space, equipment costs, and teacher certification limitations. To complicate matters, the content required for a novel, high-quality Heavy Duty Equipment Technology program intersects multiple Career Clusters® (Transportation, Logistics and Distribution, Agriculture and Architecture and Construction) and at least three separate CIP codes within. This new hybrid program requires the equipment, space and qualifications of teachers across all three of these programs.

An advisory board for the new, high-demand program is being convened, and other industry partners are becoming engaged in conversations. Representatives from JESCO and Bobcat serve on the committee, as well as other industry partners through our Next Gen Industry Partnership with the NJDOL and our sister agency, the Office of the Secretary of Higher Education. It has been determined by the core group that a new model curriculum must be created through consultation with industry and higher education. Rutgers University is invited to the conversation, and a plan to develop problem-based curricula for three courses in a sequence for a new program of study will be created this fall by subject matter experts.

This partnership and vision for a new CTE program of study was entirely industry-driven. The development of the model curriculum is guided by representatives from industry and crafted in consultation with secondary curriculum experts. Rather than the development of a curriculum and program from an education perspective, and then bringing business and industry in to development, this program originates from industry expertise and is aligned to a high-need, in-demand, high-wage occupational opportunity for students comment after its development, this program originates from industry expertise and is aligned to a high-need, in-demand, high-wage occupational opportunity for students.

b. Describe the process and criteria to be used for approving locally-developed programs of study or career pathways including how such programs address State workforce development and education needs and the criteria to assess the extent to which the local application under section 132 will—

i. promote continuous improvement in academic achievement and technical skill attainment;
ii. expand access to career and technical education for special populations; and
iii. support the inclusion of employability skills in programs of study and career pathways. (Section 122(d)(4)(B) of Perkins V*)*

New Jersey Administrative Code addresses the process and criteria for development and approval of career and technical education (CTE) programs in Chapter 19: Career and Technical Education Program and Standards. 6A:19-3.1 addresses Program requirements and 6A:19-3.2 addresses Program approval and re-approval. It is as follows:

6A:19-3.1 Program requirements:

A district board of education that seeks to operate a career and technical education program or program of study and that seeks to place or supervise students in apprenticeship training or cooperative education experiences must meet all the CTE program requirements listed below and must apply to the NJDOE for initial program approval. In addition, to continue operating a CTE program, the district must seek re-approval every five years.

A district board of education intending to offer a career and technical education program or program of study shall meet the following requirements:

1. Document a need for the program in a high-skill, high-wage, or high-demand current or emerging occupation;
2. Establish a career and technical education program advisory committee that includes parents, students, career and technical education teachers licensed in the program area, school counseling staff, representatives of business and industry with content expertise in the program area, labor organizations, school district representatives of special populations, postsecondary institutions and other interested individuals representing the appropriate programs;
3. Establish admission requirements that include equity and access for all populations, including special populations and special education students;
4. Hire instructional staff holding the appropriate certificates;
5. Develop enrollment projections of the program for the first three years of the program's operation;
6. Develop a program curriculum, which shall include:

    i. A coherent sequence of courses of not fewer than three identifiable courses;
    ii. Classroom instruction combined and coordinated with field, shop, or laboratory experiences, structured learning experiences, or other experiences which are appropriate to the competencies of the Career Clusters®;
    iii. Academic content that is aligned to the New Jersey Student Learning Standards for secondary programs, including employability skills through the Career Ready Practices;
    iv. Content that meets industry-approved or nationally-recognized skill standards;

v. Industry-recognized credentials and skill certificates, when available;
vi. A valid third-party technical skills assessment, when available;
vii. Opportunities to participate in work-based learning (structured learning experiences);
viii. Opportunities to participate in career and technical student organizations; and
ix. A career and technical education safety and health program and plan if the program is in a hazardous occupation;

7. Provide adequate resources required to operate the program, including sufficient and appropriate instructional and support staff, facilities and equipment;

8. Establish relevant postsecondary education and training linkages; and

9. Establish procedures for the evaluation of student and program performance and methods to improve programs based upon evaluation results.

While the administrative code has included these elements for many years, the New Jersey Department of Education (NJDOE) is reviewing New Jersey Administrative Code Chapter 19 in 2019-2020. This review is due to Executive Order No. 66 (1978), which stipulates that all regulations adopted after May 15, 1978 will have an expiration date no later than five years from the effective date. The regulations must be reviewed for either re-adoption without change, re-adoption with amendments or repeal of all or part of the chapter prior to the expiration date. The Perkins V reauthorization and the timing of the Chapter 19 sunset coincide fortuitously to allow for revisions to the administrative code to reflect the modifications to the state's plan for CTE.

During the one-year transition to Perkins V, districts and colleges are completing a Comprehensive Local Needs Assessment (CLNA) to better determine how well existing programs align to the local, regional and state in-demand industry sectors and to evaluate the performance of the students served by the districts and colleges. An important element of each district's CLNA will be how the district will improve recruitment, retention and training of career and technical education teachers, specialized instructional support personnel, paraprofessionals and career guidance and academic counselors, including individuals in groups underrepresented in such professions. Another essential element of the CLNA is a description of progress toward implementation of equitable access to high-quality career and technical education courses and programs of study for all students. The NJDOE has provided disaggregated performance data to districts and labor market information from our partners at New Jersey Department of Labor and Workforce Development (NJDOL) for both the regional and state level to inform the local needs assessment.

NJDOL has committed to making performance data on workforce development programs available to a variety of decision-makers, including the NJDOE, program staff and the public. The data card created by LWD for the purpose of the CLNA will be a critical tool for assisting LEAs to make informed decisions about their CTE program offerings. Each of these regional and county data cards are developed using recent labor market data from LAUS, QCEW and the Census Bureau. The strategic decisions regarding the in-demand, high-skill and high-wage occupations available to students after graduation will set the vital framework for the LEAs CTE program planning and ultimately direct the transformation of New Jersey's workforce.

Regarding the focus on improving academic attainment, the Office of Career Readiness at the NJDOE develops and distributes annual performance reports for each Perkins grantee's CTE programs. Performance reports for secondary districts are developed using data collected through the New Jersey Standards Measurement and Resource for Teaching (NJSMART) CTE data collection

system. Postsecondary performance data are collected through the Vocational Education Data System (VEDS). Actual performance is compared with the established state targets and grantees are required to use their Perkins grant funding first to address the performance of those programs that did not meet the state negotiated performance standards. This annual process forms the backbone of the continuous improvement process that grantees follow each year: assessing each program's performance against targets, creating strategies to address any indicators that are not met during the first phase of Perkins planning; creating a budget that prioritizes implementing those strategies during the second phase of the application and executing those strategies through the grant year. Throughout this process, Perkins Program Officers at the NJDOE provide technical assistance to grantees related to interpreting performance data and identifying appropriate strategies to improve program performance.

The NJDOE sees the CLNA as an opportunity to provide an additional layer of depth and analysis to this continuous improvement process. The NJDOE recognizes a potential barrier to improving CTE program quality requires districts to hold a clear understanding of the core components in a high-quality program of study, refined from past conceptions and featured in this plan. This will require extensive support and technical assistance, which will be offered as we support counties in their CLNA process. Partnership with industry will facilitate the difficult discussions around which career-focused learning opportunities are needed most in the region and the state.

Innovation Inspiration:
Morris County Vocational Partnerships Case Study

U.S. News and World Report regularly ranks Morris County's Academy for Science and Engineering among the top high schools in the nation. The administration of Morris County Vocational School District (MCVSD) recognizes that with such high honor comes incredibly high demand for entry. To begin to accommodate this clear need, MCVSD has developed unique strategies and solutions to expand access to career and technical education for many more students in Morris County. However, they have not done it alone; district leadership at MCVSD developed strong relationships between administration, staff and boards of education across the county for a common good.

An Academy Program Partnership was established between Morris County Vo-Tech, Morris Hills Regional, Roxbury and Mountain Lakes school districts and the County College of Morris. Partnerships, collaborations, host sites and satellite academies were the mechanisms for expansion, opening new CTE programs that tie to New Jersey's key industry sectors. These agreements provided for a range of different CTE offerings for new CTE students, including engineering design and manufacturing; cybersecurity and information protection; horticulture and landscaping design; culinary arts and hospitality; athletic training and physical therapy, and biotechnology at different sites across Morris County. These programs provide for dual enrollment in high school and the community college.

There were myriad partnership advantages for each partner. For example, one district highlighted the fact that they were able to utilize existing infrastructure and underutilized space (i.e. theater, music room). Another partner upgraded their high school facilities, while others engaged under-scheduled faculty and resources. Some partners spoke to the fact that declining enrollment encouraged them to reconsider their programmatic offerings, and CTE was an excellent addition to their curricular portfolio to draw students to their programs. Others created space at a new campus to increase the number of students into popular programs. All partners collaborated with other districts for professional development opportunities on a new digital platform. Every partner leveraged the relationship to meet their own needs with the goal of serving more students in CTE across Morris County. This model is one to consider and replicate with the right strategic partnerships.

c. Describe how the eligible agency will—

i. Make information on approved programs of study and career pathways (including career exploration, work-based learning opportunities, early college high schools, and dual or concurrent enrollment program opportunities) and guidance and advisement resources, available to students (and parents, as appropriate), representatives of secondary and postsecondary education, and special populations, and to the extent practicable, provide that information and those resources in a language students, parents, and educators can understand;

Over the past several years the New Jersey Department of Education (NJDOE) has expanded career pathway awareness efforts to community members in a focused and strategic fashion. In 2017, the NJDOE was awarded a grant from Advance CTE and the Siemens Foundation to attract and recruit students into high-quality career and technical education (CTE) programs of study. With a strong focus on raising awareness of career pathways to students, parents, teachers and guidance counselors, the NJDOE developed an outreach campaign pilot for middle school with a corresponding evaluation designed for research purposes.

In May of 2017, the NJDOE held the first ever *Many Paths, One Future Career Awareness Day*. Thirteen middle and junior high schools from four school districts across Union County participated in event at Kean University. Participating school districts were selected with a focus on ethnically diverse student populations, higher numbers of Limited English Proficient (LEP) students and students with disabilities as well as a higher percentage of students eligible for free and reduced lunch. The attendance was exceptional; 279 students participated in the event.

The goal of the event included increasing awareness and recruit a diverse student population, including a representative number of nontraditional students into the career pathways of Science, Technology, Engineering and Mathematics (STEM), Information Technology (IT), Advanced Manufacturing and Transportation, Distribution and Logistics. In addition, the event was crafted to conduct targeted outreach and engagement efforts to secondary and postsecondary school educators and parents to inform them of the multitude of career opportunities available in the aforementioned industry sectors and the career pathways to support entry into these fields.

While parents were invited to attend the event during the day with their children, the event was extended into the evening to accommodate a wider range of schedules with parents in mind. The evening session focused on increasing parental awareness of career pathways available to secondary students and the corresponding postsecondary opportunities offered in the region. The outreach materials were made available in multiple languages. The program provided information from business and industry and higher education on various college degree and certificate programs and the related career opportunities in these programs as well as other industry-valued credentials. In addition, current college students and recent graduates shared how their choices in high school helped to guide their career paths.

Based on the findings from the event evaluation, the event was expanded in scope and regional distribution. In 2018, the NJDOE partnered with the New Jersey Chamber of Commerce Foundation to create a series of Career Awareness Days modeled after the successful *Many Paths, One Future Career Awareness Day*. With a similar goal in mind, this series of Career Awareness Days aimed to increase understanding of CTE programs among middle grade students from a variety of socioeconomic backgrounds. Business representatives from high-demand industries and current high school and college CTE students combined to share knowledge and experience and provide hands-on activities to increase interest in CTE and career pathways. 596 middle grade students from throughout New Jersey

participated in this series of Career Awareness Days, held in on partnering college campuses the Northern, Central and Southern regions of the state.

The series of carefully evaluated Career Awareness activities provided the Office of Career Readiness with enough data to demonstrate the impact of specific strategies on a targeted population. The findings from this outreach will support the development of larger plan to increase career awareness in middle school. The NJDOE is planning to revisit the event and expand the impact by reaching more students. Several of the workshops and activities planned during each day demonstrated high positive impact on student attitudes around careers. Those specific high-impact experiences will be leveraged and packaged in new ways to offer increased opportunities for more students, possibly as the basis for model lessons or additional resources for teachers and students who could not attend the events in person.

In addition to the series of Career Awareness events planned and implemented by the Office of Career Readiness and partners, the NJDOE offers a variety of resources for students, families and schools to access at no cost. There are career exploration tools made available on our NJDOE webpage *Career Exploration Tools and Materials to Assist Educators, Counselors and Students*.

The New Jersey Career Assistance Navigator (NJCAN) is the state's free career information system and is available to all New Jersey residents. Professional development on NJCAN is provided at no cost to teachers, counselors and administrators at secondary schools, intermediaries and state agencies such as the New Jersey Division of Vocational Rehabilitation Services, Department of Children and Families and the Marie H. Katzenbach School for the Deaf. Training sessions are available as pre-recorded webinars or face-to-face sessions. This training is provided through an agreement between the Office of Career Readiness and the John J. Heldrich Center for Workforce Development at Rutgers, The State University of New Jersey.

NJCAN is designed to support lifelong career readiness through user-friendly, straightforward search and sorting utilities and an online portfolio feature that enables users to compile and save information from all system components. Self-assessment tools are available to assist students, working with their guidance office and parents, to identify career interests and employability knowledge and skills. Links to information regarding required education and training opportunities are also available. Additional resources, such as lesson plans, practical learning activities and information about the Career Ready Practices (CRP) are provided for teachers and guidance counselors.

NJCAN also provides information on preparing for job interviews, creating resumes and cover letters, exploring self-employment, military occupations and apprenticeships, keeping a job and advancing in a career. This is combined with accurate, comprehensive, current and relevant information on postsecondary opportunities, college degree-granting programs, financial aid to help inform individual decision making and long-term student success. This platform also contains the latest national, New Jersey and local labor market data and projections for labor market demand and salaries.

Despite the NJDOE's strong efforts to provide community awareness and high-quality resources to the field, the Perkins V Stakeholder Engagement process exposed some significant weaknesses across the state in the area of CTE awareness and the pathways into CTE programs. Resoundingly, when asked about awareness of CTE, students and families were not familiar with their schools' offerings and wanted to learn more. The need for a broader marketing campaign, beginning as early as upper elementary school, was made abundantly clear through the survey analysis.

Confirming and amplifying the extent of this issue, during the series of student focus groups, current CTE students offered several suggestions to improve their programs. One of the main suggestions that emerged in all groups was to increase CTE program exposure; some students found it difficult to describe their program to their peers and thought that increased awareness would make this easier. In several student focus groups, students reported feeling that their guidance counselors were not supportive in helping them to make post-high school decisions and they noted having to frequently interact with colleges themselves during their application process. They suggested hiring more counselors and making CTE, college deadlines and offering options outside of college pathways more of a priority to them.

After noting the frequency of comments related to school counselor awareness, the Office of Career Readiness reviewed the literature base to determine potential root causes of the perceived lack of support for and awareness of CTE by counselors. In 2018, The National Association for College Admission Counseling (NACAC) and the American School Counselor Association (ASCA) compiled a national landscape report to examine the 10-year trends in student-to-counselor ratios from 2004-05 to 2014-15, the latest school years for which data are available. The data was collected through the National Center for Education Statistics' (NCES) Common Core of Data (CCD).

A number of studies suggest access to a school counselor can make a significant difference in student persistence/retention, students' postsecondary aspirations and students' likelihood of enrolling in postsecondary education (CITE). However, in order to realize such results, school counselors must operate in schools without overwhelmingly large student caseloads. Unfortunately, the 2018 NACAC/ASCA research study shows a situation that may lead to potentially unmanageable caseloads for public school counselors in New Jersey. New Jersey holds a high student-to-counselor ratio (364:1), when ASCA recommends that schools strive to maintain a 250:1 student-to-counselor ratio (NACAC and ASCA, 2018). The NJDOE must also take note of any widely varying ratios within the state, as inequitable access to school counselors across districts, may limit students in the career resources they need to succeed. The NJDOE acknowledges that it must increase attention and investment to ensure the full benefit of school counseling programs with a focus on career readiness.

Despite their best efforts, it is clear that New Jersey school counselors may be spread so thin that they do not have the time or capacity to support and nurture students' career development in the ways in which they would like. Alternative tools such as NJCAN and Naviance, may have served as support or even a proxy for this work for some time. However, there is a clear need for new, additional, low-cost, high-yield interventions, strategies and techniques, tools and resources that can provide school counselors and their students the services they desperately need. A brief review of the existing literature provides some viable possibilities that may better meet the needs of our changing student population that may be considered as a possible piloting tool for New Jersey schools (Hartung & Santilli, 2018; Cardoso et al., 2017).

NJDOE has a strong partnership with New Jersey School Counselor Association (NJSCA), who has collaborated with the Office of Career Readiness on a number of CTE initiatives. The NJSCA is an active member of New Jersey's CTE Advisory Council and has supported many CTE initiatives in the past, including the state's participation in the New Skills for Youth initiative in 2016. Most recently, the NJSCA co-sponsored a workshop with NJDOE highlighting CTE and career pathways in August 2019. A recent state Assembly bill featuring apprenticeship opportunities for students (P.L.1993, c.268, discussed in Section 1.c.) requires extensive discussion and collaboration in order to develop a plan and associated resources for school counselors to support student apprenticeships in Building and Construction Trades. The NJDOE and NJSCA have been engaged in early planning activities to ensure the needs of the legislation as well as all affected stakeholders are addressed from the onset.

In a broader context, the majority of parents that responded to the stakeholder survey focused on the critical relationship building that occurred with their child's guidance team. Because school counselors serve as facilitators of information to and from students and parents, the NJDOE will co-design with NJSCA the state-level strategies and resources counselors need to address the gap in CTE and career awareness in their schools. The innovation focus on countywide collaboration presents an opportunity to better coordinate advising and guidance supports for students at the county level. The NJDOE recognizes that this work cannot rest solely on the efforts of school counselors. As referenced in the Shared Vision for the Future of CTE, a broader array of stakeholders and mentors, including industry and community partners need to be leveraged to provide adequate advising that is responsive to students' interests and span the full continuum of career development.

Innovation Inspiration:
"Paws R Us" Career Awareness Case Study

Fourth grade students at Joseph C. Caruso School in Keansburg have a "paw up" on their peers regarding career awareness and preparation. Inside this special classroom is a group of students and a teacher with a passion for helping animals in need and showing gratitude for law enforcement officers. Students open a store in their classroom where the proceeds are donated to the Monmouth County Society for the Prevention of Cruelty to Animals (SPCA) and the Monmouth County Sheriff's K-9 unit.

Unlike a more traditional school fundraising effort, the students drive the entire process instead of the parent community. The fourth graders begin the project with extensive planning, including project management and budget calculations. Their Language Arts Literacy and Mathematics content is woven into the Paws-R-Us planning. Their first steps include determining roles, responsibilities and timelines for the work ahead. They are responsible for creating their own resumes and must apply for the positions that are best suited for their interests and skill sets. They interview for the positions with their teacher using their job applications, resume, and communication skills.

The roles vary from store accountants, marketing team members, as well as product purchasing buyers who select the store's inventory. The philanthropic team determines where the profits are donated and the best mechanism to ensure the funding is distributed according to the class' wants. Last year, the class chose to donate to the MCSPCA and Monmouth County Sherriff Shaun Golden's K9 unit. The class has established a partnership with both organizations, learning about their functions and contributions to the community. The partnership was not only established to raise money for bulletproof vests and to help care and provide for the animals, but also to spread awareness of why and how these efforts benefit a community.

To raise funds for their work, students sell items donated from businesses. The students write letters and mail them to local businesses to request donations for the store. The class also holds fundraising events throughout the school year, including pet drives for animal-related donations, gift wrapping stations at local department stores during the holiday season, and bake sales.

The operation of the store is an anchoring aspect of the teacher's lesson plans that build entrepreneurial skills, as the students learn the value of running a business and other invaluable life and career skills. The students gained exposure to the world of work, including careers in business and marketing, philanthropy, animal health and care, police science, as well as human health when the students participated in therapy dog testing at the Monmouth County SPCA. What began as a service-learning project blossomed into an exemplar of excellence in preparing young students for the world of work.

ii. facilitate collaboration among eligible recipients in the development and coordination of career and technical education programs and programs of study and career pathways that include multiple entry and exit points*;*

Successful coalition-building among secondary career and technical education (CTE) educators, community college administrators, workforce and industry partners require leaders with strong political skills and the abilities to draw disparate groups together and to present clear, direct benefits of the collaboration (Hyslop, 2009). These leaders must be successful in establishing trusting, productive relationships and stress the importance of making these cross-sector connections transformational, not transactional. They also need to be able to assist the group in defining an inclusive vision for the region and identifying achievable objectives and assignments for all stakeholders.

An informal review of the limited body of research suggests that collaborative arrangements among these types of partners tend to fail because organizers focus more on transactional mode, addressing immediate needs and how to meet them, rather than considering the goals of each of the stakeholders and where the opportunities interface (Holle 2012; Manley 2012; Shulte et al. 2017). Building significant cross-sector support requires leaders' active attention to cultivating reciprocally beneficial relationships among partners. The Comprehensive Local Needs Assessment provides a platform for these discussions to begin and the focus of the process will be on the region's need being met through the partnership.

Building relationships among partners within a New Jersey county, including districts that may have competitive relationships, will not be an easy task. It is well documented that coalition-building of this nature requires careful consideration of relationship-building (Shulte et al. 2017). For example, every stakeholder group in the region must be at the table and have the opportunity to contribute to the Comprehensive Local Needs Assessment discussion in order to build consensus around the directions to take and pathways to build. This also will ensure a consistent message about regional goals and opportunities be collaboratively developed and shared by the group. Effective consortia leaders (those keystone district, industry and college partners) will need to operate under the assumption that designing, supporting and sustaining successful pipelines to local industries present an ongoing, evolving problem of adaptation and learning within and across partner districts, institutions and community leaders. It should be understood that no single partner or stakeholder, no matter how innovative or powerful, possesses the potential to close gaps identified by the group by Comprehensive Local Needs Assessment.

Coordination of the partnerships anticipated to emerge from the Comprehensive Local Needs Assessment (CLNA) require time and resources to develop and the participating organizations have little of both to spare. The Office of Career Readiness recognizes the need for additional support designed in the state plan to accomplish this outreach and negotiation work; it is also clear that fostering the necessary depth of interaction will not occur in one CLNA meeting. As noted above, research shows that achieving collective, meaningful commitment among partners requires dedicated people and infrastructure. Lack of an effective intermediary is one of the most frequent reasons why cross-sector initiatives like those New Jersey has attempted in the past may not succeed. Unlike collaborations that involve one-time or intra-sector relationships, initiatives such as the ones we hope will emerge from the CLNA process require intentional structure. These also require staff from the NJDOE and leaders from each of the stakeholder partners committed to enabling continuous communication. This will help to secure the commitment of important actors from all of the different sectors represented at the CLNA meetings and ultimately support the talent pipeline unique to each region.

A coordinated partnership requires supportive leadership at all levels, state, regional and local, as well as a long-term commitment of time and brokering resources. It is critical for the CLNA to identify issues that may affect sustainability of the partnerships from the onset. While the state plan requires Perkins Leadership and Reserve Funds to support the development of partnerships that arise from the CLNA process, the NJDOE recognizes each consortium may vary substantially from the next regarding their needs and plans for sustainability.

The NJDOE has met with success in supporting the development of innovative partnerships among schools. In 2015, the legislature appropriated a total of $10 million to offer a competitive grant program to expand CTE programs through county vocational schools. The County Vocational School District Partnership Grant was a state-funded partnership program between county vocational school districts and other school districts, business and industry groups, county colleges and other entities to expand access and student opportunities in CTE for secondary students. County Vocational Schools used their expertise to create new programs or replicate existing, successful CTE programs in new partner schools. Partners engaged by the schools included employers, businesses, industry groups and in some cases, included one or more comprehensive school districts and/or a postsecondary partner.

At the postsecondary level, funded in 2009 by Perkins leadership funds, Career and Technical Education Partnership (CTEP) grants were launched as a statewide mechanism to develop CTE programs of study in specific Career Clusters®. Six institutions of higher education, including county colleges and four-year colleges, were granted awards to develop partnerships and linkages among secondary, postsecondary, business, industry and labor and workforce development entities. The purpose of the CTEP partnerships were to provide resources and tools aligned to these clusters and ultimately develop a model program of study that included dual credit options for high school students. Over the course of four years of collaboration, model programs of study were developed and piloted, resulting in more quality CTE programs of study available for students. The Rutgers Health Science program and the Global Supply Chain Management programs mentioned above are strong examples of successes with postsecondary partners in the development of model programs.

Because of these combined efforts, the number of programs of study in which a New Jersey student has the opportunity to earn college credit while in high school has grown significantly from 78 programs in 2011 to 328 in 2016 to 369 approved programs of study as of June 2019. This affirms New Jersey's capacity and tenacity to implement significant systemic changes in order to have positive impacts on students. These efforts have spanned many years, but through constancy of leadership and commitment to a vision, the NJDOE has clear evidence of progress.

It is clear that Perkins V encourages and supports broad, cross-sector action and regional/county collaboration. This call for collaborative problem-solving and action differs significantly from the past narrower frame of the NJDOE funding discrete programs or specific transactions. To truly build a strong system of college and career readiness, the NJDOE and our partners must think in terms of system change and new relationships.

Innovation Inspiration:
Gloucester County Institute of Technology
Collegiate High School Case Study

The Gloucester County Institute of Technology (GCIT) and Rowan College of South Jersey (RCSJ) have a long history of close partnership, being located within a few miles of each other. This strong partnership has generated a new model for career pathways, capable of customization to the unique needs of each member of the diverse student population. The GCIT Collegiate High School Program is a cost-saving, fully customizable option, which allows students to tailor their career and educational pathway. Through the GCIT Collegiate High School Program, GCIT seniors can design their ideal high school education while earning college credit.

This dual enrollment advantage agreement offers college-level courses exclusively through RCSJ throughout an underclassmen's schedule as well as in the senior year of high school. All senior students at GCIT are eligible to participate in the Collegiate High School experience, providing them an alternative pathway to a quality education at significant cost savings. Students who elect to participate in the Collegiate High School option will individually select their courses via RCSJ's High School Option Program (HSOP). Course selection will be based on individual and career goals, choice institution of higher learning, and major/degree in which they intend to pursue. Coursework completed may be applied to an RCSJ degree program or be transferred to another institution of higher education.

There are two options for students: 1) senior elects to attend RCSJ and take college-level English and physical education courses. Students may choose to return to GCIT to take CP and Honors electives, participate in School to Work and/or continue on their career path; 2) senior elects to attend RCSJ and take college-level English and physical education courses. Students may pursue additional coursework through HSOP. Students are fully immersed in RCGSJ courses on campus. For the second option students will be registered for HSOP courses with 65% discounted tuition rates. RCSJ's HSOP offers the opportunity for students to save money while earning college credit, and an associate degree, all before high school graduation. In 2017-18, GCIT had five seniors who earned associate degrees in May, prior to graduating high school in June. That number increased to 16 in 2018-19. This was also the first year of Collegiate High School, and 146 senior students earned a total of 4,239 credits by participating in this program. Currently, in 2019-2020, approximately 190 students are enrolled in GCIT's Collegiate High School and have the potential to earn a total of 5,163 credits this school year. These articulations between the two institutions include academic courses as well as CTE courses, and some include career industry credentials that students earn while in high school.

The pathway to a four-year institution and a baccalaureate degree for students continues seamlessly with the Rowan Choice program. The program offers incoming freshmen to Rowan University the opportunity to earn 24-30 college credits through RCSJ, while taking classes at and living on Rowan University's campus, saving a significant amount. Upon successful completion, students enter Rowan University as fully matriculated sophomores and may declare their majors upon completing 24-30 credits. This program may significantly increase access to higher education for special population students.

iii. use State, regional, or local labor market data to determine alignment of eligible recipients' programs of study to the needs of the State, regional, or local economy, including in-demand industry sectors and occupations identified by the State board, and to align career and technical education with such needs, as appropriate

New Jersey celebrates a very high standard of quality across career and technical education (CTE) program offerings at both the secondary and postsecondary levels. While New Jersey has worked hard to improve the quality of CTE programs through a much more rigorous Perkins funding application and CTE program approval process, tight alignment to labor market information as a justification for funding has previously not been required. This will be the focus, as reflected in the Comprehensive Local Needs Assessment (CLNA).

Despite best efforts and intentions, not all CTE programs provide students with the same value in the labor market. Perkins V legislation calls attention to a tighter alignment of labor market needs and New Jersey recognizes that this has not been a strong element of our quality program review in the past. This new focus aligns with Governor Murphy's call for a "stronger, fairer New Jersey" as he supports high-quality CTE programs that lead students to high-skill, high-wage and in-demand career opportunities in our state and beyond. These elements are reflected in our new definition of program of study and how programs will be approved and funded in the future.

Phasing out or transforming programs of study that do not meet current labor market demands may be straightforward on paper, but there are immediate consequences for CTE students and staff. This process will involve robust communication with districts and schools outlining the timeline for elimination and make clear assurances that students currently completing these pathways will not be cut off. This process will also require strong collaboration with districts as they plan for the impact on affected staff. This may include support and options to bridge teaching staff into other prioritized programs of study. These significant considerations will be addressed and managed throughout the transition to Perkins V.

The CLNA is a vehicle for the transition of districts towards better alignment of programs to labor market information. It is a process that drives the local funding application development and future spending decisions. The process is an opportunity for stakeholders to collectively take an in-depth look at the county or region's entire local CTE system and identify areas where targeted improvements can lead to increased student success. To implement the CLNA, a wide range of stakeholders must gather to evaluate how CTE programs collectively measure up against labor market demands.

As mentioned above, New Jersey Department of Labor (NJDOL), the Heldrich Center and New Jersey Department of Education (NJDOE) have had a long-standing partnership in working towards the development of demand-driven quality CTE programs. Over the past decade, NJDOL has identified key industry sectors and provided NJDOE with the most current labor market data to inform secondary and postsecondary program development and revision. The study and the novel research methodology designed and conducted by the Heldrich Center in 2016 assisted NJDOE in increasing alignment between CTE programs and the state's key industry sections.

In the most recent act of partnership, NJDOL crafted labor market information cards for the NJDOE and LEAs, which distills local and state labor market information into a format to support the CLNA process. Data cards are created for each county in New Jersey, as well as an additional separate card for the northern, central and southern regions of the state. Labor market information cards include information such as average wage, number of establishments within the key industries in the region, annual average employment and wages within each key industry for the region and commuter data

for worker residents. The NJDOE created a guidance document to assist in the facilitation of the discussion (see CLNA, Appendix B).

iv. ensure equal access to approved career and technical education programs of study and activities assisted under this Act for special populations;

The mission and vision of the Office of Career Readiness at the New Jersey Department of Education (NJDOE) support Governor Murphy's initiatives by ensuring New Jersey's 1.4 million students have equitable access to high-quality education and achieve academic excellence. The NJDOE believes a strong foundation of high-quality Career and Technical Education lays the groundwork for students to have equitable access to career pathways programs preparing them with the skills and knowledge necessary to be prepared for postsecondary success, regardless of whether they choose to enter college or join the workforce directly from high school.

To this end, the NJDOE is reinforcing the equity-focus within our statewide processes associated with career and technical education (CTE). The Comprehensive Local Needs Assessment will highlight gaps across engagement and performance. A root cause analysis will be conducted and a plan to address those gaps at county and local levels will be developed. The NJDOE will continue to support and expand the resources provided to our LEAs in service to this critical need.

Addressing equity in CTE is not a novel issue for New Jersey. At the most basic level, NJDOE regulations strongly enforce the requirement to attend to equity. New Jersey Administrative Code *N.J.A.C.* 6A:7 Equality in Educational Programs applies broadly to all programs and initiatives administered and supported by the NJDOE. These rules require each district board of education, including county vocational school districts and comprehensive high schools, to develop a comprehensive equity plan once every three years to identify and correct all discriminatory practices and inequitable educational and hiring policies, patterns, programs and practices affecting its facilities, programs, students and staff. A discriminatory practice is defined in the rules as

> "a policy, action, or failure to act that limits or denies equal access to or benefits from the educational activities or programs of a school, or that generates or permits injustice or unfair or otherwise inequitable treatment of students or staff on the basis of race, creed, color, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, religion, disability, or socioeconomic status."

To ensure compliance with this crucial policy, New Jersey maintains responsibility for conducting targeted reviews of selected secondary and postsecondary schools providing career and technical education; securing corrective action when civil rights violations are found; and periodically reporting civil rights findings to the Office of Civil Rights (OCR). The Office of Career Readiness works with schools at the secondary and postsecondary level to provide statewide leadership, advocacy, oversight and technical assistance to ensure CTE programs meet state and federal civil rights requirements through our Methods of Administration (MOA) process. The NJDOE monitors CTE districts and county colleges each year through the MOA program, ensuring that all students, regardless of race, color, national origin, sex, or disability have equal access to high-quality career and technical education programs. If a district or college is found to be out of compliance, a corrective action plan is developed with specific deliverables, critical actions and a monitoring timeline. A team from the Office of Career Readiness follows up to ensure the district remediates the areas of need.

Beyond regulations, the Office of Career Readiness also provides direct oversight of all of the approved CTE programs, ensuring that they meet all state and federal requirements regarding access and meet performance expectations for all student subgroups, including preparation for careers in industries requiring technical expertise. This policy is mandated in *N.J.A.C.* and all recipients of Perkins funding agree to ensure non-discrimination and access in the assurances statement for each program they implement.

In addition to code and statutes, New Jersey has proudly signaled the importance of equity in CTE by creating an equity-focused research and outreach group, the Career Equity Resource Center (CERC). The program was forged through an agreement with the School of Management and Labor Relations at Rutgers University, but was brought into the Office of Career Readiness in 2015 to better align CTE programming, approval and oversight processes. CERC is focused exclusively on promoting equity and diversity in CTE. CERC provides trainings to NJDOE staff, government agencies, school and university-based staff/leadership and assorted CTE administrators to promote equity as a priority through both the secondary and postsecondary systems. The research-based technical assistance is a data-driven process where local school districts and colleges are asked to analyze disaggregated data and begin to examine root causes of gaps that exist within their programs. Most importantly, the trainings raise awareness of and address issues pertaining to implicit bias, cultural awareness and diversity; they are interactive and sensitively uncover the effects of stereotypes and bias on everyday experiences.

Since the inception of CERC in 2010, CERC has acquired a 96% approval rating of content delivery and relevance, has program participation averages of more than 500 participants annually, has specialized in more than 10 targeted professional development programs and services to districts statewide and most recently, has served more than 2000 teachers, staff and school administrators between 2016-2018. Trainings are provided at no cost to the requesting group and are customized to the unique needs of the recipients. The trainings are evaluated to ensure that the needs of the participants are being met and to garner recommendations for continuous improvement. Because participants receive timely and responsive customized training, they often request follow-up support within the year or across years. The trainings are voluntary; the services are marketed via NJDOE communications and our state website. CERC also relies heavily on our internal Perkins program officers to connect their grantees to the service, especially when gaps in performance have been identified. In the past, Perkins program officers highlighted the need for training from a compliance perspective. The Office looks forward to the need to better attend to equity becoming clear through the Comprehensive Local Needs Assessment, as it will likely create a grassroots effort to shift mindsets in local CTE offerings. The goal is to leverage the Comprehensive Local Needs Assessment (CLNA) process to bring this program and process to scale, transforming not only the world of CTE but more broadly the mindset and practices within the education community.

During the 2019-2020 transition year, the NJDOE reengaged the Center for Women and Work at the School of Management and Labor Relations at Rutgers University to expand the outreach of CERC services. This complements the services and augments the reach of the NJDOE's internal team and includes additional technical assistance to secondary schools and county colleges to assist in building their own internal capacity to increase access and opportunity for special population students to pursue high skill, high wage, in-demand CTE careers.

In addition, the NJDOE has engaged with the National Alliance for Partnerships in Equity (NAPE) to support the strategic initiatives laid out in the plan and developing capacity within the Office of Career Readiness to better support LEAs. A New Jersey CTE teacher preparation program provider has expressed interest in partnering with NAPE and including a course on Equity in CTE within the training sequence. The NJDOE is also collaborating internally with the Office of Certification and

Induction and externally with the CTE teacher preparation programs it supports to explore the possibility of including three specialization opportunities for additional licensure endorsements for teachers of students with disabilities and English language learners.

Another trusted partner for the NJDOE is the Boggs Center of Rutgers Robert Wood Johnson Medical School, Department of Pediatrics. The Boggs Center is New Jersey's federally designated University Center for Excellence in Developmental Disabilities. The Center provides community and student training and technical assistance, conducts research and disseminates information and educational materials. The NJDOE Office of Special Education has a steadfast partnership with the Boggs Center and the Office of Career Readiness has recently engaged the Center directly to increase the capacity of the Office and better support LEAs.

The Office of Career Readiness has embraced the philosophy that all decisions and efforts must be viewed through an equity lens. In addition, by having staff focused exclusively on addressing issues related to equity and diversity, the NJDOE is supporting internal office staff with the knowledge to think and talk about issues through an equity and diversity lens. All office staff participate in training and professional development on equity matters in order to be equipped to provide strategies and tools to assist local programs in identifying and addressing equity and access issues as a process of continuous improvement. This has been significantly helpful in fostering a state agency culture that values equity.

During the transition year, the Office of Career Readiness engaged in a rigorous analysis of data to identify any gaps that exist in serving all students in quality CTE programs. This included a thorough analysis of the gaps by sub-groups of participants and completers in current CTE programs in high-skill, high-demand occupations in the seven key industries. This analysis will guide efforts to scale up the work of the Career Equity Resource Center and establish baseline data for improvement. Targets will be set to address gaps incrementally through the state plan. Implementation of the plan will fundamentally reshape the landscape of CTE in the state by truly addressing an underlying, longstanding access issue.

The findings from the landscape analysis, amplified by the reports and feedback from our stakeholder groups, solidified the foundational goal of this state plan: Equity of Opportunity and Access. The NJODE has committed to supporting the creation of expanded opportunities for each student to access quality CTE programs, ensuring the equitable distribution of CTE programs throughout the state and the ability of all students to actively participate in those programs. The increase in reserve funds will support innovation at the county-level to increase participation by underserved populations. This signals the gravity of the issue and underscores the critical nature of designing more effective solutions to narrowing equity, access and expectation gaps that exist.

Though equity is a core principle of the agency's work, NJDOE recognizes that the single most significant educational challenge remains providing equity in opportunities for achievement for all New Jersey students. This Perkins plan amplifies New Jersey's commitment to creating conditions across the state to allow for each child to acquire the skills and knowledge to be successful in their postsecondary pursuits.

Innovation Inspiration:
Pathway in Technology Early College High School Case Study

New Jersey proudly joined several other states in adopting the Pathway in Technology Early College High School (P-TECH) educational model in three high schools for the 2019-2020 school year. The P-TECH model, co-developed by IBM, spans grades 9 through 14 and brings together public high schools, community colleges, and businesses to create a clear pathway from high school to college to career. Participating students at the three P-TECH schools, located in Burlington City, New Brunswick and Paterson, will graduate with a high school diploma, Associate degrees in competitive STEM fields, and workplace experiences, within six years. Supporting STEM-focused high school programs and increasing degree attainment for all residents are key to New Jersey's Economic Plan.

Governor Murphy shared how the P-TECH model supports the burgeoning New Jersey economy:

> "Through this innovative partnership, students will receive a high-quality education and gain in-demand skills that employers need in the 21st century, while employers will gain a diverse pipeline of skilled employees," said Governor Murphy. "I am thrilled that we are bringing this model to New Jersey. It will enable New Jersey's bright young minds to flourish and help prepare the next generation of leaders. By providing students with the skills needed for these high-wage, high-skill jobs, New Jersey is strengthening its talent base to remain economically competitive for years to come."

P-TECH is a sustainable and scalable model of partnership among public education, the private sector, and policymakers serving as champions for a new kind of high school. The model will demonstrate how New Jersey high schools can transform how we teach students for the world of today and the future. The model features one solution to help create seamless pathways for students to gain competitive STEM careers. It is also designed to support students in traditionally underserved communities, as the lottery system for admission offers all interested students an opportunity to embark on new pathways to success in high-demand STEM fields.

A key hallmark of the program is the close partnership forged among the comprehensive high school, local community college, and industry partners to ensure students master academic, technical, and professional skills such as problem solving and collaboration, which together put them on a clear pathway to in-demand career skill mastery and overall educational success. The industry partners work closely with their high school and community college partners to ensure alignment with in-demand industry skills and provide mentoring, workplace visits, speaker presentations, and paid internships. Graduates are first in line for jobs with industry partners.

v. coordinate with the State board to support the local development of career pathways and articulate processes by which career pathways will be developed by local workforce development boards, as appropriate;

The Office of Career Readiness has a strong and supportive relationship with our State Board of Education (NJSBOE). The NJSBOE has created a career and technical education (CTE) subcommittee with members meeting directly with New Jersey Department of Education (NJDOE) staff year-round to deeply discuss CTE and become highly proficient regarding the Perkins legislation. This subcommittee supports peer NJSBOE members in understanding the nuances of CTE programs and regulations that differ from those of general education. The subcommittee joins Office of Career Readiness staff on site visits to schools, attends Career and Technical Student Organization events and is present at CTE events and celebrations held by districts. Several of the subcommittee members have direct personal experience with CTE in New Jersey, some with family members participating in CTE programs.

Every February, the State Board of Education dedicates its February meeting to an examination of career and technical education in New Jersey. During these meetings, the State Board invites staff of the Office to present the successes and challenges in CTE, often highlighting the incredible students that represent CTE programs around the state. Students from approved CTE programs provide testimony to the board for the purposes of sharing their experiences with the board and revealing how CTE has made an indelible impact on their education and career pathway.

During convening of the entire NJSBOE at regular monthly meetings, Office staff may address potential barriers to students in accessing the opportunities CTE offers. The NJSBOE recognizes the need to increase equity and access to career and technical education for students and has offered recommendations. Understanding the need to strengthen partnership and increase collaboration with stakeholders, the NJSBOE has suggested different paths to relationship building. The NJSBOE shares the vision that all New Jersey students should have equal access and opportunities in CTE programming and has made informed recommendations to address barriers. Because the NJSBOE is kept abreast of the challenges unique to CTE, the Board can readily respond to recommendations and proposed changes to administrative code related to CTE.

This ability to respond efficiently to needs in CTE was evident at the NJSBOE meeting in March of 2019. The Division of Academics and Performance proposed updated draft regulations to address shortages of CTE teachers. The NJSBOE was previously briefed on the issues facing CTE, including the need to provide enough qualified instructors in the classroom. Because the NJSBOE was acutely aware of the need for greater availability of CTE programs to meet the growing demand, they were prepared to analyze and respond to the proposed regulatory changes on an accelerated timeline. The CTE Teacher Certification regulatory package (addressed in further detail in 4.a) is proposed for adoption in November 2019.

At the most basic level of support, New Jersey Administrative Code *(N.J.A.C)* requires NJSBOE oversight of the state's CTE Plan:

N.J.A.C 6A:8-2.2 Authority for the State Plan for Career and Technical Education

> (a) The State Board shall serve as required by P.L. 109-270 and designated by N.J.S.A. 18A:59-5 as the sole agency responsible for the administration of the State Plan for Career and Technical Education and the legally constituted State Board for Career and Technical Education.

(b) The State Board will be guided by the NJSLS and, particularly, Standard 8: Technology and Standard 9: 21st Century Life and Careers, in developing the State Plan for Career and Technical Education required under P.L. 109-270.

As mentioned previously, the NJDOE is reviewing New Jersey Administrative Code *N.J.A.C.* Chapter 19: Career and Technical Education for review and revision in 2019-2020. This review is due to Public Law *P.L.* C.52:14B-5.1, 10.b., which stipulates all regulations adopted after 2011 are subject to an expiration date no later than seven years from the effective date. The regulations must be reviewed for either re-adoption without change, re-adoption with amendments or repeal of all or part of the chapter prior to the expiration date.

The code development process undertaken by the NJSBOE is based on three overarching goals.

These goals are to:

(1) bring the State Board into the policy development process earlier to allow for discussions at the conceptual level and the opportunity for consensus building which would not otherwise exist;
(2) receive input from the education groups, stakeholders and other interested members of the public before the development of specific code language; and
(3) accomplish the above objectives without lengthening the code adoption process.

The regulations have a seven-year expiration period and are assigned a sunset date. The sunset provision ensures that each chapter is reviewed for its continued effectiveness at least every five years. Because the Office of Career Readiness, the CTE subcommittee of the NJSBOE and the entire NJSBOE are engaged in regular dialogue, the NJSBOE will be able to review the Chapter 19 regulatory package with great facility and make informed recommendations to the NJDOE in a timely fashion. The NJSBOE has been regularly briefed on the Perkins V reauthorization and understands the vision and focus areas at both the federal and state levels. The Perkins V reauthorization and the timing of the Chapter 19 sunset coincide fortuitously to allow for our State Board to make revisions to the administrative code to reflect the modifications to the state's plan for CTE. The board is to be presented the draft plan in November of 2019.

vi. support effective and meaningful collaboration between secondary schools, postsecondary institutions, and employers to provide students with experience in, and understanding of, all aspects of an industry, which may include work-based learning such as internships, mentorships, simulated work environments, and other hands-on or inquiry-based learning activities; and

At the secondary and postsecondary levels, New Jersey recognizes the value of the entire spectrum of work-based learning, referred to as Structured Learning Experiences (SLE) in New Jersey. These career readiness experiences provide a suite of instructional strategies to better prepare students for college and the workforce, and thus has required it of all approved career and technical education (CTE) programs and programs of study. To help districts consider the diversity of SLEs, the Office of Career Readiness has considered and shared models of 4 broad categories on an SLE continuum: career awareness, career exploration, career preparation and career training. Eleven types of SLEs (which would fall under the 4 categories) are explicitly addressed in the current New Jersey Administrative Code (*N.J.A.C.* 6A:19) that include: apprenticeship training, cooperative education experience, internship, job shadowing, national/community service projects, school-based enterprises, service learning, supervised agriculture experience and volunteerism.

As the New Jersey Department of Education (NJDOE) transitions towards a new conception of Work-Based Learning (WBL) in place of our model of Structured Learning Experiences, only those experiences characterized as career preparation and career training will be considered quality WBL indicators of acceptable experiences for students in approved CTE programs and programs of study. SLEs are supervised, in-depth learning experiences aligned to the New Jersey Student Learning Standards (NJSLS) that are designed to assist students to more fully: clarify career goals and interests; explore career possibilities; develop and use employability skills; demonstrate and apply high level academic and technical skills; ease the transition between high school and employment; prompt consideration for further education and training; and enhance career readiness. While all WBL opportunities may valuable to students, the NJDOE is focused on the provision of higher-quality work-based learning experiences that will allow students better access to authentic work experiences.

The NJDOE begins its definition of an SLE as *an experiential, supervised, comprehensive, in-depth learning experience integrated into the curriculum*. A SLE consists of rigorous classroom and workplace components designed to offer each student the opportunity to authentically explore their career interests. These interests can be within one or more of the *N.J.A.C.*-defined Career Clusters. The Career Clusters and associated CIP codes are classified as hazardous or nonhazardous (*N.J.A.C.* 6A:8-3.2 Career education and counseling).

As mentioned above, the Alliance supports SLEs of all categories in our state. The Alliance has representatives from both federal and state Departments of Labor as well as public health and policy experts from New Jersey colleges. Relevant laws and regulations are monitored and enforced nationally primarily by USDOL (OSHA and the Wage and Hour Division), while state level laws, codes and regulations pertaining to occupational safety and health are monitored and enforced by the multiple state agencies, including the NJDOE; LWD; and the Department of Health and Senior Services (Division of Epidemiology, Environmental and Occupational Health's Public Employees Occupational Safety and Health Program). These agencies' perspectives are represented in the Alliance, ensuring that aspects of federal and state laws that pertain to SLEs are upheld. Any SLE implemented through approved CTE program or program of study in New Jersey must comply with federal laws and regulations (e.g., 29 C.F.R. 1910). Federal and state laws address both paid and unpaid SLEs; however, paid SLEs are tightly regulated because they may occur in hazardous (allowable only through a cooperative education experience for students enrolled in an approved hazardous CTE program or

program of study and under the supervision of an endorsed cooperative education coordinator that meets the requirements set forth by NJDOE) and nonhazardous occupations. Unpaid SLEs may be referred to as internships or volunteer (only allowable at non-profits) activities with the public or private sector.

Because SLEs occur primarily during school hours with supervision by trained school personnel, well-trained teachers could enhance the knowledge, skills and awareness of students about their health and safety in the workplace. New Jersey is a proud leader in offering extensive guidance and providing strong support for teachers who oversee SLEs in schools. The Alliance was instrumental in crafting an early national model for promoting safe work-based learning experiences for students. The New Jersey Safe Schools Program is a supervisory training curriculum supported by the NJDOE, Office of Career Readiness. The New Jersey SLE Supervisory Training Program comprises training courses and resources for teachers who supervise secondary school students (aged 16 to 18 years and special needs students up to age 21) enrolled in various school programs (not just restricted to CTE programs). One goal of the New Jersey Safe Schools Program is to enhance knowledge and awareness of legal and scientific occupational safety and health principles to ensure safe, rewarding work experiences inside and outside classrooms.

The New Jersey SLE Supervisory Training Program developed for individuals who hold a standard instructional certificate is comprised of five training courses for 48 contact hours over eight training days. Participating teachers receive access to resources and the extensive training that is required to become certified to oversee SLEs. Teachers are selected and supported by school districts to attend or, in some cases, choose to receive the training at their own expense. As WBL is expanded throughout the state and the level of quality experiences for students is increased, these trainings will need to accommodate more participants on a larger scale.

Overall goals of the SLE supervisory training curriculum included the enhancement of knowledge and awareness of legal and scientific occupational safety and health principles to ensure safe, rewarding experiences for students in the workplace. Some of the concepts addressed in the training include potential hazards; exposure assessment, control, mitigation and prevention methods; techniques from industrial hygiene; quantitative risk-assessment process; adolescents' vulnerability factors; and potential acute adverse health outcome.

New Jersey has created a number of progressive expansion initiatives that direct resources to support the growth of work-based learning and experiences for residents. New Jersey is focused on increasing the number of apprenticeships in key industries and, in some cases, for populations with barriers to employment. The state has leveraged the support of other organizations and structures that broker relationships between employers, providers (including schools, colleges and career centers) and individuals.

While work-based learning has significant potential to improve competitiveness and career opportunities, there are barriers to taking these strategies to scale. For example, while apprenticeship has long been recognized as an effective model in the trades and employers who utilize the model are strongly supportive, it has not expanded efficiently to other industries, in part because of businesses' lack of familiarity with apprenticeship and concerns about the complexity of the registration process. For small- and medium-sized businesses, the costs of developing, implementing and running work-based learning models can be or seem prohibitive. Many firms lack the expertise or capacity to ensure that training is structured appropriately. Another challenge for employers is an interest in offering work-based learning opportunities to students and out-of-school youth, but they express difficulty in getting started. Low-income individuals may want to take part in work-based learning but lack the resources to pay for tuition, child care or transportation. A number of new state policies support

apprenticeships and work-based learning, all of which were designed to address these and other barriers with the intent to benefit diverse populations across industries.

Demonstrating the state's early commitment to WBL is The Youth Transitions to Work Partnership Program established in 1993 by the New Jersey State Legislature (c.268 C.34:15E-1 et seq.) to support youth apprenticeship and pre-apprenticeship programs for secondary students. Local consortia of business, business organizations, labor organizations and educational institutions can apply for funding to implement YTTW programs. Grants are funded at a maximum amount of $8,500 per participant. The amount of total funding available for FY20 is approximately $1,500,000

The Registered Apprenticeship Incentive Program is another state-supported strategy to offset employer apprenticeship training related costs for small and midsize manufacturers, such as on-the-job training, related classroom instruction, supervision by a journey person, or remediation of basic skills. The program provides employers with $5,000 for each registered apprentice. The first payment of $2,500 is paid after the apprentice completes 26 weeks of employment as an apprentice and the second payment of $2,500 is issued after the apprentice completes 52 weeks of employment as an apprentice.

As mentioned above, the NJDOE announced the Expanding Pre-Apprenticeship in a New Direction (ExPAND) grant in August 2019 to increase the number of high school students (at least 16 years old) participating in and completing pre-apprenticeship programs that are aligned to a Registered Apprenticeship occupation recognized by the U.S. Department of Labor, as well as a New Jersey industry of focus as identified by the NJDOL. The NJDOE will make six awards to school districts in each geographic region of New Jersey. This funding will provide financial and technical support to districts to grow pre-apprenticeship programs that provide high school students career focused competencies and skills in priority sectors. The NJDOL Office of Apprenticeship and the United States Department of Labor's New Jersey Office of Apprenticeship are offering Scaling Apprenticeship Through Sector-Based Strategies grants to expand New Jersey community colleges' efforts to build career pathways also driven by the needs of the state's key industries. Through these efforts, it is clear New Jersey is committed to supporting work experiences for students that align to New Jersey's in-demand industries. Through these grants, NJDOE and our partners will have the ability to research promising practices in the development of apprenticeships in New Jersey.

In 2018, the Senate and General Assembly of the State of New Jersey passed an act concerning apprenticeship training information and supplementing P.L.1993, c.268 (C.34:15E-1 et seq.). This act was signed into law on May 10,2019 and requires the Commissioner of Education to develop guidelines to encourage high school students to participate in apprenticeship training. The Commissioner of Education must consult with the Commissioner of Labor and Workforce Development and develop guidelines for use by high school counselors to coordinate services with representatives of the New Jersey State Building and Construction Trades Council. The goal of the collaboration is to encourage and increase student participation in apprenticeships and to raise awareness of apprenticeship opportunities. The guidelines are currently in development in partnership with New Jersey Department of Labor and Workforce Development (NJDOL) and will be shared with the New Jersey School Counselor Association for consideration, feedback and the development of a strategy for supporting those school counselors responsible for disseminating the apprenticeship information.

In 2019-2020, the NJDOE partnered with the US Department of Labor to create a registered Youth Apprenticeship: Greenskeeper and Sports Turf Management Apprenticeship program. This apprenticeship is the first of its kind within the State of New Jersey and may have the potential to serve as a national model. The opportunity is offered through the Horticulture Landscaping program

at the Monmouth County Vocational School District Career Center in Freehold, New Jersey. Students will have the opportunity to engage in and complete this two-year program, completing various curriculum components and training at the Career Center. They will apply the skills during the summer at one of the Monmouth County Parks golf courses, working in roles such as landscape management technicians.

The NJDOE believes that all students in New Jersey should have access to engage in work outside of the classroom related to their field of study and apprenticeships give students meaningful exposure to build skills that prepare them for success after graduation. Students, employers and the state economy will benefit from this suite of innovative collaborations.

However, even before students reach an age where they can participate in a work-based learning experience, they can engage in experiences that can build some workplace skills and inspire interest in careers. Research indicates that middle school students are highly influenced by service learning, and these experiences are effective in building the social and emotional skills of middle school students in particular (Zins et al.). In recent years, the NJDOE has highlighted the importance of social and emotional learning in schools, with a particular focus during adolescence. Though service learning is not a new instructional method, recent research has demonstrated how to successfully deliver service learning in school curriculum for middle school students with a focus on career awareness (Gestsdottir et al. 2010; Mueller et al., 2011).

vii. improve outcomes and reduce performance gaps for CTE concentrators, including those who are members of special populations. (Section 122(d)(4)(C) of Perkins V)

During the 2019-2020 transition year, the Office of Career Readiness conducted a significant landscape analysis of statewide student performance in career and technical education (CTE) programs including a critical analysis by subpopulations by career clusters and classification of instructional program (CIP) codes. Significant trends emerged from this specific study, and a plan to address some of the most significant gaps was crafted for pilot. At the onset of the study, each cluster was analyzed by the composition of participating students and also the performance of those subpopulations.

NJDOE plans to revisit the classic "Math-in-CTE" and "Literacy-in-CTE" models that other states have shown to be effective in increasing student performance. However, the New Jersey Department of Education (NJDOE) will use student data from state assessments and analysis from the landscape review to inform directly and better tailor the curricular products for the highest need areas and students.

In one proposed project under consideration, academic area teachers will craft a basic frame for several model curricular units with a focus on the core academic math and LAL content that students in CTE demonstrate disproportionately lower scores on the New Jersey Student Learning Assessments (NJSLA). The cluster areas and Classification of Instructional Program (CIP) codes that students show lower academic attainment will be the focus of the CTE content overlay. The NJSLA data is disaggregated and reported at the standards level, so analysis of CTE students can be determined for each standard within a tested academic area (math, English language arts, and science). For example, high school geometry teachers will create a bare unit based around the specific geometry content that CTE students are shown to struggle with mastery. Teams of CTE teachers in the highest-need clusters will work with geometry teachers to build respective CTE content units around the targeted ideas. Carpentry teachers may build their unit into a framing or roofing focus, while nursing teachers may transform the same geometry content into a unit on burn victim surface area and course of treatment. In both cases, the focus is equally on the geometry content and the unique content of CTE; however, the career overlay increases engagement and access to the math content.

A similar project will produce additional model units for use in specific programs that serve subgroups of interest and special populations. The model units would be crafted with the guidance and support of specialists for the academic content area, as well as through support of teachers of students with disabilities and/or teachers of students of other languages. The units developed will focus both on supporting learning of core academic content as well as the specific career content of the program.

The analysis also revealed that certain CIP codes serve special populations and critical subgroups, and the development of a model curriculum through postsecondary partnership. This must include contributions by NJDOE specialists outside of CTE, including the Office of Special Education, Bilingual Education and increased advisement by New Jersey Department of Labor and Workforce Development (NJDOL) and industry partners for authenticity. An example would be the development of a Certified Nursing Assistant (CNA) model program, that includes a strong focus on math and science New Jersey Student Learning Standards (NJSLS) to support students' academic performance in those areas. While the current Rutgers Health Science curriculum exists for this cluster, it serves a different population of students and the courses are not used for one of the cluster's most highly enrolled CIP codes because of the postsecondary rigor of the program.

d. Describe how the eligible agency, if it chooses to do so, will include the opportunity for secondary school students to participate in dual or concurrent enrollment programs, early college high school, or competency-based education. (Section 122(d)(4)(D) of Perkins V)

New Jersey has proudly supported secondary students in dual enrollment and early college experiences for decades. Administrative code was adopted to explicitly encourage these partnerships to form between secondary and postsecondary:

N.J.A.C. 6A:8-3.3 Enrollment in college courses

(a) District boards of education, pursuant to *N.J.S.A*. 18A:61C-1, shall make reasonable efforts to increase the availability of college-level instruction for high school students through courses offered by institutions of higher education at their campuses and in high schools. The credits shall be accepted at all public New Jersey higher education institutions pursuant to *N.J.S.A.* 18A:61C-8.

(b) District boards of education shall determine the eligibility of students to participate in college courses.

(c) District boards of education and partner colleges shall ensure that college courses offered to high school students are:

1. Equivalent to those offered to regularly admitted college students; and
2. Accepted toward both college degree and high school graduation requirements.

(d) District boards of education and partner colleges shall ensure that college courses for high school students are taught by college faculty with academic rank. Adjunct faculty and members of the district staff who have a minimum of a master's degree may also be included.

One of the first early college programs supported directly by the New Jersey Department of Education (NJDOE) was Rutgers University's School of Health Professions' Careers in Health Sciences Program. Since its launch in 1993, more than 65 high schools in New Jersey have adopted the Rutgers SHP Careers in Health Sciences Program, and the program has graduated more than 15,000 students. The program is part of the regular high school day, where students take college-level, interdisciplinary, general health care, communication and science courses generally during the junior and senior year of high school. Students in the program gain a solid foundation in the health sciences, and their experience with college level course work enhances academic skill development. In addition to coursework, students perform 10 hours of clinical shadowing during each of their two years in the program. The program continues to grow over the past few decades with new schools.

While the Careers in Health Sciences Program has met with great success, new models are being created to serve new industries and different students. In 2018, the NJDOE designed a grant opportunity that would address the need to develop a highly skilled workforce in an in-demand STEM pathway through forming strong partnerships between education, business, industry and Institutions of Higher Education (IHE). The vision of the program is to "provide access and opportunity for underrepresented students in New Jersey's comprehensive high schools to an education in an in-demand STEM career pathway by participating in grades 9–14 industry driven, high-quality dual enrollment and early college program where they earn a high school diploma, a postsecondary degree and gain valuable employability skills."

The FY 2019 STEM Dual Enrollment and Early College High School (P-TECH) grant was funded by $400,000 from the FY2019 State Budget and $500,000 from Federal Perkins Leadership funds. This funding is being used for a pilot program, intended to provide access and opportunity for underrepresented students. It is offered to underserved students from three comprehensive high schools and provides access to an education in an in-demand STEM career pathway. Students participate in a career and technical education (CTE) program where they earn a high school diploma, a postsecondary degree and gain valuable employability skills. The following comprehensive school districts (one for each region of New Jersey) were selected to participate: Paterson, New Brunswick and Burlington City.

The P-TECH grant was open only to districts with high school student enrollment with a minimum of 400 students. A minimum of 50 percent of students enrolled must have been considered economically disadvantaged, defined by receiving free and reduced lunch on the most recent School Report Card. The eligible high school must have also been located within 20 miles from an industry partner and postsecondary/institution of higher education (IHE) partner. Each district is required to partner with the community college in their county and with at least one business partner.

During the preparation period, districts worked with their steering committees made up of district personnel, industry professionals and IHE's to develop a program Scope and Sequence, Recruitment Plan, Staffing Plan, Stakeholder Communication Plan, Curriculum, Structured Learning Experience (SLE) Plan, Transportation Plan, CTE program application. Districts completed Recruitment, Application (open access to all students) and Student Selection (through lottery process). Each district held a signing night event for students, parents and district personnel to celebrate and sign the P-TECH commitment form. Summer Bridge programs were held during the summer of 2019 at all districts for academic, technical and employability skill building and program preparation.
During the implementation phase beginning September 2019, the districts formally initiated the program with the first cohort of students and created a culture of learning by forming student learning communities. They created a professional development plan and implemented a student support plan. They leverage and provide opportunity for student leadership through career and technical student organizations (CTSO). Lastly, districts have developed a plan to ensure the sustainability of the program after the grant period has ended. They must also engage in ongoing conversations to determine the source of funding for college credits for students who participate in the early college high school model.

The NJDOE's early college high school model is the core of the P-TECH grant but can be replicated in future grant opportunities focused on developing talent to serve other key industries in New Jersey.

The components of the NJDOE's early college model are as follows:

- The program must be approved as a CTE program of study
- Industry Partnerships: Programs should have at least one IHE and one business partner with required, signed Partnership Agreement Forms
- Open Access for Enrollment: All students are welcome to participate in the program based on their interest with a focus on historically underserved students
- Integrated High School and College Coursework, Linked to Industry Skills: With support from business and IHE partners, using experiential learning and individualized career planning, students will complete the program with a high school diploma, no-cost postsecondary degree and industry certifications in less than six years
- Enhanced Student Support: Utilize counseling and intervention techniques to ensure that students graduate high school and receive a college degree without need for remediation

- Culture of Learning: Initiate Student learning communities that include an emphasis on social emotional development, transformative learning, student engagement, creativity and innovation, valued mentorships, leadership development and perpetual learning
- Workplace Learning: Integrated into the curriculum will be frequent workplace learning experiences such as, mentors, guest speakers, job shadowing, paid internships and first in line for jobs

While the NJDOE recognizes that early college models are not an appropriate fit for every student in New Jersey, nor are they necessary for entry into every key industry in New Jersey, the Office of Career Readiness and associated stakeholders are keeping a close eye on the P-TECH model. The Office maintains the intent to identify best practices and leverage those critical aspects to improve the quality of CTE programs across the state in all key industries. One of the most critical aspects of the program is its strong focus on access and equity; there are no admissions tests for the programs permitted and all applicants are placed in a lottery for acceptance. The New Jersey Department of Education intends to carefully evaluate the data and anecdotal evidence that is generated by this specific early college model, and the findings will be reviewed to serve as basis to revisit and potentially amend administrative code with intent to better support the replication of those programs.

e. Describe how the eligible agency will involve parents, academic and career and technical education teachers, administrators, faculty, career guidance and academic counselors, local business (including small businesses), labor organizations, and representatives of Indian Tribes and Tribal organizations, as appropriate, in the planning, development, implementation, and evaluation of its career and technical education programs. (Section 122(d)(12) of Perkins V)

At the core of the Comprehensive Local Needs Assessment (CLNA) process is a diverse body of stakeholders that must be represented in the process. In the case of the district or college developing or revising a program of study, all members of the community are considered stakeholders and may have important and relevant input to the planning, development, implementation and evaluation. Perkins V legislation identifies these required groups and the New Jersey Department of Education (NJDOE) Office of Career Readiness will ensure counties engage these partners in the CLNA process through attendance at the countywide meetings and documentation of attendees.

Guidance in planning the CLNA process at the county level and subsequent meetings is offered by the NJDOE (Appendix B). This document provides links to various organizations, contacts and directories that can help LEAs locate the stakeholders needed to support their outreach efforts. One of the most critical groups to engage represents students from special populations, which includes homeless youth, foster youth and English learners. Historically underrepresented and marginalized, special populations may take LEAS extra effort to engage, and the CLNA guidance offers resources and examples of ways to reach out. Bringing these groups into the process should not only be seen as a requirement, but it offers LEAs an opportunity to proactively address practices that may have unintentionally excluded these groups from career and technical education (CTE) programs or led to lower participation in the past.

Recommended participants for the CLNA process appear in the guidance document. This includes the obvious district administration partners and those business and industry representatives already engaged in CTE through the Advisory Boards for a school or a program, but there are many other organizations that have not been invited to participate. The limited scope of engagement of certain groups were uncovered by the Perkins V Stakeholder Engagement Process; an invitation to the CLNA process has been built into the NJDOE guidance. Some of these organizations include the division of vocational rehabilitation, child welfare agencies, migrant support agencies, one-stop employment centers and disability resource centers. Local college and career programs are invaluable resources and may not have had a seat at local tables in the past when discussing CTE.

The NJDOE recognizes that having the full spectrum of stakeholders at the table during the CLNA process is not only a requirement but serves primarily as an opportunity. LEAs will learn about the impact of their CTE programs from partners who have been outside of the decision process in the past. They will offer diverse perspectives and can only improve the quality and relevance of the state's CTE program offerings.

f. Include a copy of the local application template that the eligible agency will require eligible recipients to submit pursuant to section 134(b) of Perkins V.

See Appendix A

g. Include a copy of the local needs assessment template that the eligible agency will require eligible recipients to submit pursuant to section 134(c) of Perkins V.

See Appendix B Comprehensive Local Needs Assessment

h. Provide the definition for "size, scope, and quality" that the eligible agency will use to make funds available to eligible recipients pursuant to section 135(B) of Perkins V.

Size **(Numerical Value)**	**Scope** **(Curricular Considerations)**	**Quality** **(Measurable Results)**
Programs must include a coherent sequence of not fewer than three CTE courses; or two years of CTE courses for a County Vocational-Technical School District	Fundable programs will transition over time to become Programs of Study, where students are prepared to obtain a recognized postsecondary credential[1]	Fundable programs are limited to programs that prepare students for occupations that meet at least 2 of the 3 criteria: high-skill, high-wage and in-demand occupations
Minimum of 10 Students per program level/per year; *abnormal one-year drop in enrollment will not cause concern until a downward trend emerges*	The curriculum offers academic, technical and employability skills verified by an advisory board specific to the program	Students are achieving program goals, objectives and are making progress toward each of the indicators
Schools must offer a minimum of one approved Program of Study to receive funding[2] *but must transition all programs over the next three years*	Links or pathways must exist between the secondary and postsecondary CTE Programs of Study	The program has certified teachers providing instruction on industry and academic standards
Advisory boards must be composed of at least 30% of participants with industry experience specific to the program	The curriculum shows a progression of instruction towards an occupation or profession and includes pathways to advancement	All students have engaged in internships, apprenticeships and/or work-based experiences *in the related industry* by the end of program completion

CTE Programs must support career pathways meeting two of the following three criteria:

High-skill occupations require a high level of knowledge in a technical domain and may have credentials, certificates and degrees associated with advancement. Each level of typical educational attainment will have a set of occupations classified as high skill.[3] These occupations may not require a bachelor's degree for entry into the field but have access and pathways at multiple points with opportunities for advancement.

High-wage occupations[3] pay at or above the median hourly wage ($20.96) or the mean annual wage for New Jersey ($58,210). This calculation will be adjusted annually and provided to the NJDOE by NJDOL.

In-demand occupations have more than the median number of total (growth plus replacement) openings statewide or in a particular region. This data at the county level will be provided annually by NJDOL to the NJDOE for use by LEAs in the Comprehensive Local Needs Assessment.

[1] Per WIOA TEGL 10-16, a **recognized postsecondary credential** "means a credential consisting of an industry-recognized certificate or certification, a certificate of completion of an apprenticeship, a license recognized by the State involved or Federal Government, or an associate or baccalaureate degree."
[2] All funded CTE programs must develop a plan over the next three years to include attainment of a recognized postsecondary credential in the transition towards Programs of Study
[3] The NJDOL's Office of Research and Information has provided NJDOE with a formal methodology for the identification of specific high-wage, in-demand occupations. The list of these occupations will be provided as a reference to LEAs annually.

3. Meeting the Needs of Special Populations

a. Describe its program strategies for special populations, including a description of how individuals who are members of special populations—
   i. will be provided with equal access to activities assisted under this Act;
   ii. will not be discriminated against on the basis of status as a member of a special population;
   iii. will be provided with programs designed to enable individuals who are members of special populations to meet or exceed State determined levels of performance described in section 113, and prepare special populations for further learning and for high-skill, high-wage, or in-demand industry sectors or occupations;
   iv. will be provided with appropriate accommodations; and
   v. will be provided instruction and work-based learning opportunities in integrated settings that support competitive, integrated employment. (Section 122(d)(9) of Perkins V*)*

New Jersey is fully prepared to prioritize advancing equity in career and technical education (CTE). In the past we have acknowledged the equity gaps and created policies and practices that address the student tracking that occurred in CTE programming. Through the customization of New Jersey's Comprehensive Local Needs Assessment (CLNA) process, including addressing root causes of significant equity and access issues, districts will be challenged to explain the history of the problem in their district, be confronted with the scope and extent of the current problem and develop explicit plans to solve the problem. Beyond that, policies and strategies to address the gaps in access, engagement and performance by special populations are explicitly integrated throughout this state plan.

The New Jersey Department of Education (NJDOE), through our own internal analysis and with our districts through the CLNA process, will use data as a mechanism to draw attention to the significant gaps in enrollment and completion by population. We will work collaboratively towards the goal of making CTE programs accessible to all students in New Jersey.

The New Jersey Department of Education, Office of Career Readiness commits to:

- Gathering data that shows the degree of inequity in CTE programs across the state through the Comprehensive Local Needs Assessment;
- Developing a CTE rebranding campaign targeted for special populations to increase awareness of district staff and students;
- Focusing on the counseling of middle-school special population students, helping them become more "CTE-ready" and better able to access CTE opportunities;
- Committing to transparency by advancing and funding only high-quality CTE programs of study for special populations in inclusive learning environments;
- Implementing strategies and projects that garner support for and increase access to and meaningful participation in CTE programs for special populations; and
- Celebrating, analyzing, supporting and replicating programs of study and practices that successfully support students identified in special populations.

The NJDOE has strong relationships with a number of sister government agencies and strongly support CTE programming in each setting and will continue to partner and support these agencies.

The Marie H. Katzenbach School for the Deaf (Katzenbach) uses Perkins funds to provide opportunities for deaf and hard of hearing high school-aged students to participate in CTE programs in Culinary Arts and Automotive Technology. Katzenbach's Automotive Technology program was reevaluated by the National Institute for Automotive Service Excellence (ASE) in May 2018, leading to the renewal of NATEF/ ASE certification for the automotive program. Katzenbach students participate in work-based learning experiences that allow students to successfully transition from a classroom setting where everyone uses American Sign Language to communicate into a hearing work environment.

The New Jersey Department of Children and Families Office of Education (NJDCF-OOE) currently provide career and technical education programs at a total of fifteen school sites, four contracted programs and four psychiatric hospital sites, serving a total of over 1,000 students. Through the implementation of the Edmentum on-line CTE curriculum system, NJDCF-OOE will continue to provide 64 industry-specific course options, including entrepreneurship.

In addition, NJDCF-OOE intends to offer the following types of opportunities:

- The expansion of Structured Learning Experiences (SLE) and community-based instruction at most sites throughout the DCF-OOE system, including the continued successful partnership with Habitat for Humanities in North Jersey, where multiple SLEs were conducted; and
- The Pregnant and Parenting Teen Program (TEACH) has expanded to multiple campuses. The Dual Enrollment Programs at these schools have proven to be successful for the participating students. As part of TEACH, an Introduction to Nursing Class will continue to be offered at multiple campuses.

As mentioned, the NJDOE will also support the pilot of model programs for career-focused certification or credential programs. These programs may provide more flexible options for underserved students, as the commitment to two or three-year programs left certain special populations at higher risk of not completing the sequence of courses and/or obtaining appropriate postsecondary credentials. The NJDOE is working with the New Jersey Juvenile Justice Commission, the New Jersey Department of Children and Families and with internal NJDOE colleagues in the Bureau of Bilingual Education to determine how to best serve students with higher mobility rates, which include incarcerated, foster and migrant student populations. This need for programs using a limited duration structure was illuminated exclusively through our stakeholder engagement process and began the conversations as to how the NJDOE can best serve these students in their career pathways.

4. Preparing Teachers and Faculty

a. Describe how the eligible agency will support the recruitment and preparation of teachers, including special education teachers, faculty, school principals, administrators, specialized instructional support personnel, and paraprofessionals to provide career and technical education instruction, leadership, and support, including professional development that provides the knowledge and skills needed to work with and improve instruction for special populations. (Section 122(d)(6) of Perkins V)

For the past several years, the state of New Jersey has listed Career and Technical Education Endorsements on the United States Department of Education's Teacher Shortage Area list. According to a 2016 analysis of career and technical education (CTE) teacher certification data completed by the New Jersey Department of Education (NJDOE) and the Heldrich Center at Rutgers University the existing undersupply of CTE teachers was quantified in several of the Career Clusters that align to New Jersey's key industries. The data show that the state is experiencing a shortage in the supply of teachers certified to teach CTE programs, particularly in in-demand industries. The shortage is most severe in the following Career Clusters® that align to the state's in-demand industries: Science, Technology, Engineering and Mathematics (STEM); Health Science; Agriculture, Food and Natural Resources; and Architecture and Construction. In these clusters, the number of CTE programs approaches or exceeds the number of teachers who possess the CTE endorsement required to teach the course. Amplifying the issues on the supply side, the NJDOE has set aggressive goals to increase the number of CTE programs, particularly in these identified in-demand industries.

A rigorous, fully developed CTE program that includes elements such as work-based learning and an articulation agreement with a postsecondary institution requires more than one certified CTE teacher to support it. Therefore, Career Clusters where the ratio of CTE teachers to approved CTE programs is less than two to one are concerning and demanded an immediate intervention strategy. The result of an increased demand on the already tight supply of CTE teachers in New Jersey will be a CTE program crisis as districts are forced to close CTE programs due to a severe lack of certified teachers. Compounding this demand is the fact that the New Jersey Department of Labor and Workforce Development (NJDOL) is also working on several key initiatives that will result in a dramatic increase in the demand for CTE teachers over the next five years (list).

The NJDOE conducted a follow-up analysis in late 2017 to better understand the composition of the current CTE teacher population in the state. The shortage in the state's CTE teacher supply will worsen in the upcoming decade as a significant number of CTE teachers approach retirement age. According to the NJDOE's analysis of the 2015-2016 school year data, half of all CTE teachers in the state are 52 years or older and a quarter are 59 years old or older. The pending shortage will be particularly acute among teachers in in-demand Career Clusters including Health Sciences, where half of all teachers are 58 or older and a quarter are 62 or older.

Confirmation of these alarming findings was conducted through a series of focus groups in the spring of 2016, which confirmed the severity of a shortage in the supply of teachers certified to teach CTE programs in New Jersey. These qualitative reports also confirmed that the crisis in New Jersey's CTE teacher supply will worsen without intervention in the upcoming decade, as our district partners confirmed that a significant number of teachers of their programs will reach retirement age. The stakeholders, including superintendents, human resources directors and other administrators in school districts offering CTE programs, were each able to provide a clear example of how the CTE teacher shortage has affected his or her school district's CTE program offerings. The stakeholders

indicated the most common consequence of not being able to find suitable CTE teacher candidates was the inability to offer a certain CTE program or the closure of existing CTE programs. School districts also reported cases where they were forced to hire or retain teachers that would not be considered for ongoing employment if there were an adequate supply of high-quality candidates.

During the focus groups, the NJDOE also received consistent feedback from stakeholders that the current rules are overly restrictive and unnecessarily limit school districts' access to qualified, diverse pools of candidates. For example, the rules limited work experience to employment that occurred within 10 years of the endorsement application. However, a candidate relying on educational attainment to qualify for the CTE endorsement can earn a bachelor's degree at any time prior to application without regard to how long ago the candidate obtained the degree. The rules also did not allow candidates to use teaching experience in the specific occupation to count toward work experience. Teaching experience in the occupation acquired in a postsecondary institution or private school is indicative of a candidate's knowledge of the occupation and ability to teach the content area.

As a result of this comprehensive CTE certification analysis, the state Board of Education adopted changes to the administrative code in November 2019. Among these changes were the elimination of most of the unnecessary barriers to CTE teacher certification identified by stakeholders and focus groups. The existing code was limiting access into an already decreasing pool of qualified CTE teachers and the regulatory changes not only remediated the problematic code but also introduced a new mechanism for general education teachers to "bridge" into CTE endorsements.

The amendments appear in New Jersey Administrative Code (*N.J.A.C.)* 6A:9, Professional Standards and *N.J.A.C*. 6A:9B, State Board of Examiners and Certification, and they provide flexibility for individuals seeking to obtain a CTE endorsement to an instructional certificate and to increase the pool of CTE teacher candidates. The amendments are intended to address CTE teacher shortages in in-demand industries and occupations, which affect approved CTE programs of study in comprehensive high schools, charter high schools and county vocational school districts. New rules at *N.J.A.C*. 6A:9B-11.3 also establish the CTE Teacher Bridge process, through which teachers already certified in another subject area will be able to obtain a CTE endorsement within an in-demand industry sector or occupation that is experiencing a shortage of CTE teachers.

Compounding the teacher supply issue prior to the last decade was a significant concern regarding teacher preparation programs that were less relevant to CTE teachers and may have let candidates less prepared for the CTE classroom. Until 2010, there was only one type of alternate route teacher preparation program available to teaching candidates in the state of New Jersey. Based on concern from the field on the limited value of this program for CTE teachers, the State Board adopted regulations to develop a specific program for CTE teachers. In the 2010-2011 school year, the NJDOE issued a limited competitive Notice of Grant Opportunity to establish an alternate route teacher preparation program, the Career and Technical Education Provisional Teacher Preparation pilot program, to meet the unique needs of CTE educators transitioning to the classroom from industry. Brookdale Community College was the successful applicant and since the 2010 pilot has been offering this program through a combination of on-line coursework and in-person meetings that occur regionally throughout the state. This program continues to be partially funded through the NJDOE's Perkins State Leadership funds, and Brookdale Community College and the NJDOE continue to work collaboratively as partners to successfully prepare industry experts to become CTE teachers. The program has prepared over 1000 new CTE teachers thus far and has the capacity to prepare additional educators each year.

While the alternate route CTE preparation program at Brookdale Community College was universally lauded for its potential and obvious utility, recent research with statewide focus groups in 2016

uncovered that districts and teacher candidates are looking for an alternative. The most frequently voiced request was to offer the program exclusively online or to duplicate it at multiple locations in different regions around New Jersey. Some districts in the northern, western and southern regions have voiced concerns for the fact that their candidates are not able or willing to drive more than an hour every month (some individuals would have to travel over two hours each way) to attend the required in-person trainings, and this is greatly limiting the capacity of some districts to expand or to offer new CTE programs to their students. The NJDOE has heard this request and has guided and supported Brookdale Community College in the expansion to two satellite locations which began accepting new candidates in Spring 2019. Despite these new sites opening up, stakeholders continue to voice concerns about geographic and time barriers for potentially qualified candidates.

In an attempt to build the pipeline and serve more teachers, the NJDOE holds a new Memorandum of Understanding with the College of Education at William Paterson University to create a three-tiered Career and Technical Education Teacher Preparation Program (WP CTETPP) framework that meets the needs of candidates as well as the state's rigorous expectations for teacher preparation programs. This framework is based on the interest and needs of new CTE teachers coupled with the expertise and experience of the COE's years of preparing exceptional teachers and strong guidance and input from the CTE professions.

In 2016, New Jersey was a proud recipient of the U.S. Department of Education's *High School Career and Technical Education Teacher Pathway Initiative (CTE-TPI)* grant. This initiative, funded out of Perkins National Programs dollars, was launched in response to numerous states reporting to OCTAE that they were experiencing a shortage of teachers in key CTE areas. The opportunity was offered in order to help increase the supply of high school CTE teachers available to teach students in CTE programs that align to in-demand industry sectors or occupations in states and communities where shortages of such teachers exist. The New Jersey Department of Education's *High School CTE Teacher Pathway Initiative* project was developed to increase the supply of high school CTE teachers in program areas aligned with the state's In-Demand industry sectors of Advanced Manufacturing; Life Sciences; Healthcare; Technology; Transportation, Distribution and Logistics; Food Manufacturing; and Construction & Utilities.

The NJDOE is still in the process of welcoming districts with approved CTE programs to participate in the CTE Teacher Pathway Initiative, through one or both of two separate programs: Teacher Bridge and Industry Fellows. The CTE Teacher Bridge program helps current general education teachers in subjects such as math or science transition to the role of a CTE teacher. Beginning in summer 2019, businesses provided opportunities for teachers to participate in summer industry externships for 160 hours. Teachers who participate in industry externships are mentored by an experienced CTE teacher during the school year as well. These teachers will submit a portfolio assessment to obtain the CTE endorsement. Through the Industry Fellows program, industry experts are invited to co-teach on a part-time basis with experienced CTE teachers. Over the course of a school year, the industry expert will co-teach for 100 hours to determine if it is a viable career transition. During the provisional teaching time of two years, industry fellows participate in the alternate route 400 hours of teacher training offered by Brookdale. The costs of pre-service training, externships, co-mentoring and certificate attainment are covered though the grant.

Despite the thorough outreach conducted for the purpose of the certification analysis, the Perkins V stakeholder engagement process uncovered some additional unrecognized nuances of the challenges in teacher certification, including how to best serve the needs of special populations. Critical additions to the CTE teacher preparation programs regarding specialization are currently under discussion; they include separate tracks for the possibility of new endorsements for teachers of students with disabilities, English language learners, as well as those teachers who oversee work-based learning.

During the summer of 2019, the Division of Academics and Performance at the NJDOE began a comprehensive landscape analysis of certification code. Through this analysis, it was demonstrated that CTE teachers that are licensed through work experience alone or through obtaining an associate degree and work experience are not eligible to apply for a Teach of Students with Disabilities or Bilingual endorsements. The Offices of Certification and Induction, Teacher Recruitment, Preparation and Retention and the Career Readiness is amid discussions to create new endorsements to better meet the needs of New Jersey's students.

The limited availability of CTE teachers, previously only one CTE teacher preparation program available to train teachers, and the previously restrictive eligibility requirements for the endorsement in the previous rules impacted NJDOE CTE initiatives significantly. Through this plan, the NJDOE has set aggressive goals to increase the number of CTE programs, particularly in identified in-demand industries. New Jersey Department of Labor and Workforce Development (NJDOL) is working on initiatives that will result in a significant increase in the demand for CTE teachers during the next five years. An increased demand on the already limited supply of CTE teachers in the state poses a CTE program crisis which could force school districts to close more CTE programs due to a lack of certified teachers.

The adopted amendment package and the addition of a new CTE teacher preparation program offers more flexibility for candidates for the CTE endorsement, which will result in an increased pool of candidates while maintaining the high-quality professional standards for educators and ensuring that educators are well prepared to teach and lead in the classroom. The NJDOE anticipates that the amendments will increase equity of access to CTE programs and educational programs and opportunities for students interested in vocational-technical career paths and contribute to expansion of the state's economy.

Fiscal Responsibility

1. Describe the criteria and process for how the eligible agency will approve eligible recipients for funds under this Act, including how—
   a. each eligible recipient will promote academic achievement;
   b. each eligible recipient will promote skill attainment, including skill attainment that leads to a recognized postsecondary credential; and
   c. each eligible recipient will ensure the local needs assessment under section 134 takes into consideration local economic and education needs, including, where appropriate, in-demand industry sectors and occupations. (Section 122(d)(5) of Perkins V)

To be eligible for Perkins funds at the secondary level in New Jersey, a district must meet the following criteria:

- Conduct a comprehensive local needs assessment related to career and technical education (CTE) and include the results of the needs assessment in the local application
- Update the comprehensive local needs assessment not less than once every two (2) years;
- Must have at least one currently approved CTE program of study (POS)[1];
- Must have run a CTE program for at least a year and collected and submitted a year's worth of enrollment data; and
- Must have a minimum federal gross allocation of $15,000 or be part of a consortium.

Data will be collected about math, language arts and science academic achievement through student performance on the New Jersey Student Learning Assessments. For each approved program, the eligible recipient will be required to select an New Jersey Department of Education (NJDOE) approved technical skill assessment or other teacher-developed end-of-program assessment to measure how well students perform on technical skill attainment. As has been the past practice, performance will be compared to target performance levels. Eligible recipients who do not meet the performance target for an indicator must use Perkins funds on a strategy targeted at improving performance related to that indicator. Eligible recipients will not be allowed to spend Perkins funds on other items or strategies until all not met indicators have been addressed.

The local needs assessment will rely on labor market information and data provided by the New Jersey Department of Labor and Workforce Development and the regional workforce development boards. This information will be compared regionally to available career and technical education programs to identify gaps and misalignments.

[1] All funded CTE programs must develop a plan over the next three years to include attainment of a recognized postsecondary credential in the transition towards programs of study.

2. Describe how funds received by the eligible agency through the allotment made under section 111 of the Act will be distributed—
    a. among career and technical education at the secondary level, or career and technical education at the postsecondary and adult level, or both, including how such distribution will most effectively provide students with the skills needed to succeed in the workplace; and

    b. among any consortia that may be formed among secondary schools and eligible institutions, and how funds will be distributed among the members of the consortia, including the rationale for such distribution and how it will most effectively provide students with the skills needed to succeed in the workplace. (Section 122(d)(8) of Perkins V)

After significant consideration, the New Jersey Department of Education (NJDOE) will continue the current practice of distributing 85 percent of the state's federal Perkins allocation to eligible recipients.

Of this 85 percent of funds, 15 percent will be awarded to eligible recipients through reserve funds through the provision in Section 112(c) of the Perkins Act as follows:

- Five and a half percent to be used to support secondary programs in county vocational school districts that serve high percentages and high numbers of career and technical education (CTE) participants and CTE concentrators; and
- Two percent to be used to support secondary programs in areas designated as rural. The remainder of the 85% will be divided, with 55% being allocated to secondary districts and 45% allocated to postsecondary institutions.
- Seven and a half percent will be used to foster innovation.

The rural reserve allows rural districts, whose allocations would be too small to provide effective CTE programs, to provide high-quality CTE programs to their students. The county vocational school district reserve allows those districts that have a high percentage and high numbers of CTE participants and CTE concentrators to offer high-quality opportunities to those students. NJDOE will be using of reserve funds to foster innovation through the identification and promotion of promising and proven career and technical education programs, practices and strategies, which may include programs, practices and strategies that prepare individuals for nontraditional fields.

NJDOE has also reexamined the split of funds between secondary and postsecondary and determined that the distribution will remain the same. The split of funds between the secondary (55%) and postsecondary (45%) levels includes a slightly higher percentage of funding to secondary schools, particularly as it compares to enrollment. The reason for this is that the secondary schools are forming the foundational base for postsecondary education and generating the interest in career pathways that students will be able to carry forward whether they continue to a four-year degree, a two-year degree, the military, apprenticeship, or directly into the workforce.

To apply for Perkins funding, in accordance with Section 122(d)(8) of Perkins V, New Jersey will ensure that eligible secondary institutions receive a minimum gross allocation of $15,000 and eligible postsecondary institutions receive a minimum allocation of $50,000.

If the recipient's allocation would be less than either of these amounts, depending on the type of institution, the NJDOE will notify the recipient that it may:

- Enter into a consortium with one or more recipients for the purpose of providing enhanced services and to meet the minimum grant requirement; or
- Form a consortium with a county vocational school district offering programs that meet the requirements of the act and transfer such allocation to the county vocational school district.

Members of a consortium will combine their individual gross allocations to form the funding pool for the consortium to meet the threshold allocation amount. The NJDOE will ensure, through direct communication and technical assistance with local eligible recipients, funds allocated to a consortium are to be used only for purposes and programs that are mutually beneficial to all members of the consortium and authorized under this title.

The ability to form a consortium gives districts the opportunity to prepare students with the skills needed in the workplace by being able to participate in high-quality CTE programs, otherwise not available. The districts can also exercise local control over the configuration of CTE delivery in their region so that they can offer students the types of career pathways program that are important in that region.

3. Provide the specific dollar allocations made available by the eligible agency for career and technical education programs and programs of study under section 131(a)-(e) of the Act and describe how these allocations are distributed to local educational agencies, areas career and technical education schools and educational service agencies within the State. (Section 131(g) of Perkins V)

The anticipated allocation for secondary districts is $12,772,082. This amount includes $1,729,444 of carryover funding. The total amount of secondary funding will be allocated for approved career and technical education (CTE) programs in comprehensive high school districts, county vocational school districts and charter schools.

Distribution to local secondary education agencies has been, and will continue to be, based on a two-step formula. As required by Section 131(a), the first step uses federal census data from the preceding fiscal year to determine the gross allocation and is calculated as follows:

- Thirty (30) percent of the allocation is allocated to local education agencies in proportion to the number of individuals aged 5 through 17, inclusive, who reside in the school district served by the local education agency in comparison to the total number of such individuals who reside in the school districts served by all local education agencies in the state.

- Seventy (70) percent of the allocation is based on the number of individuals aged five through 17, inclusive, who reside in the school district served by the local education agency and are from families below the poverty level, as determined by census data, compared to the total number of such individuals who reside in the school districts served by all the local educational agencies in the state.

The sum of these two segments determines the gross allocation that may be used to serve the CTE students residing in the district. Each district's gross allocation of funds may be divided among other secondary institutions that provide CTE instruction to its students.

The second step of the formula determines the amount of funds that the district may keep based upon the proportion of CTE students that are served by the district, rather than served by other secondary institutions (e.g. charter schools or county vocational school districts). If all CTE students are served by the local district, the local district keeps the entire gross allocation.

However, if any students are enrolled in another secondary institution, the gross allocation is divided by the number of CTE students to establish a per pupil amount. For those students attending CTE programs outside the district, the per pupil amount is allocated to the district where the student receives CTE services. In essence, the per pupil funds follow the students. The amount of funds kept by the local district is the net allocation.

4. Provide the specific dollar allocations made available by the eligible agency for career and technical education programs and programs of study under section 132(a) of the Act and describe how these allocations are distributed to eligible institutions and consortia of eligible institutions within the State.

The anticipated allocation for postsecondary institutions is $9,988,574. This amount includes $994,598 of carryover funding. The Vocational Education Data System (VEDS) will be used to gather enrollment data for economically disadvantaged postsecondary students who receive Pell Grants, Federal College Work Study, Supplemental Educational Opportunity Grants, Subsidized Direct Loans, Educational Opportunity Funds, Tuition Aid Grants and Need- Based Institutional Grants or Scholarships. Each postsecondary institution's number of students with economic need is compared to the state's total number of students with economic need in order to arrive at a percentage. This percentage is then multiplied by the total allotted postsecondary funding to arrive at the institution's allocation.

5. Describe how the eligible agency will adjust the data used to make the allocations to reflect any changes in school district boundaries that may have occurred since the population and/or enrollment data was collected, and include local education agencies without geographical boundaries, such as charter schools and secondary schools funded by the Bureau of Indian Education. (Section 131(a)(3) of Perkins V)

New Jersey Department of Education (NJDOE) submits district boundary data annually every September to the United States Census Bureau. As a result, there are usually no changes to the boundaries after the population and/or enrollment data are submitted. In 2016, NJDOE created a pseudo-district, Joint Base McGuire-Dix-Lakehurst, to accommodate an agreement between Pemberton Township, North Hanover and Northern Burlington Regional school districts serving Burlington County, New Jersey. In order to allocate secondary funding for these districts accurately every year, the NJDOE obtains enrollment figures from them and moves students to the correct receiving district to allocate the grant funding.

6. If the eligible agency will submit an application for a waiver to the secondary allocation formula described in section 131(a)—
   a. include a proposal for such an alternative formula; and
   b. describe how the waiver demonstrates that a proposed alternative formula more effectively targets funds on the basis of poverty (as defined by the Office of Management and Budget and revised annually in accordance with section 673(2) of the Community Services Block Grant Act (42 U.S.C. 9902(2)) to local educational agencies with the State. (Section 131(b) of Perkins V)

   Also indicate if this is a waiver request for which you received approval under the prior Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV).

The New Jersey Department of Education (NJDOE) is not requesting a waiver to either the secondary allocation formula described in Section 131(a) or postsecondary allocation formula described in section 132(a) of Perkins V.

7. If the eligible agency will submit an application for a waiver to the postsecondary allocation formula described in section 132(a)—
   a. include a proposal for such an alternative formula; and
   b. describe how the formula does not result in a distribution of funds to the eligible institutions or consortia with the State that have the highest numbers of economically disadvantaged individuals and that an alternative formula will result in such a distribution. (Section 132(b) of Perkins V)

   Also indicate if this is a waiver request for which you received approval under the prior Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV).

The New Jersey Department of Education (NJDOE) is not requesting a waiver to either the secondary allocation formula described in Section 131(a) or postsecondary allocation formula described in section 132(a) of Perkins V.

8. Provide the State's fiscal effort per student, or aggregate expenditures for the State, that will establish the baseline for the Secretary's annual determination on whether the State has maintained its fiscal effort, and indicate whether the baseline is a continuing level or new level. If the baseline is new, please provide the fiscal effort per student, or aggregate expenditures for the State, for the preceding fiscal year. (Section 211(b)(1)(D) of Perkins V)

The state of New Jersey's baseline fiscal effort in aggregate is $162,610,569. The state will continue to use New Jersey's fiscal effort for aggregate expenditures with respect to career and technical education, as was in effect on the day before the date of enactment of the *Strengthening Career and Technical Education for the 21st Century Act*.

Accountability for Results

1. Identify and include at least one (1) of the following indicators of career and technical education program quality—
   a. the percentage of CTE concentrators (see Text Box 2 on the following page) graduating from high school having attained a recognized postsecondary credential;
   b. the percentage of CTE concentrators graduating high school having attained postsecondary credits in relevant career and technical education programs and programs of study earned through a dual or concurrent enrollment program or another credit transfer agreement; and/or
   c. the percentage of CTE concentrators graduating from high school having participated in work-based learning. (Section 113(b)(2)(A)(iv)(I) of Perkins V)

New Jersey has selected the percentage of CTE concentrators graduating from high school having participated in work-based learning as the indicator of CTE program quality.

Include any other measure of student success in career and technical education that is statewide, valid, and reliable, and comparable across the State. (Section 113(b)(2)(A)(iv)(II) of Perkins IV)

Data on the percentage of CTE concentrators graduating from high school having attained a recognized postsecondary credential as well as the percentage of CTE concentrators graduating high school having attained postsecondary credits in relevant CTE programs of study earned through a dual or concurrent enrollment program or another credit transfer agreement will also be collected but not reported as a quality indicator.

Provide the eligible agency's measurement definition with a numerator and denominator for each of the quality indicator(s) the eligible agency selects to use.

The definition for the Program Quality-Participated in Work-Based Learning* measure is:

Numerator: Total number of CTE concentrators graduating from high school during the current academic year having participated in work-based learning* directly related to their CTE program in any year.

Denominator: Total number of CTE concentrators graduating from high school during the current academic year.

Work-based Learning (WBL) will be classified according to a tiered system, which includes four levels of engagement: Career Awareness, Career Exploration, Career Preparation and Career Training. All four levels will be defined more clearly in forthcoming guidance. All four levels of WBL will be reported by LEAs; however, only Exploration, Preparation and Training will qualify as indicators of program quality.

2. Provide on the form in Section V.B, for each year covered by the State plan beginning in FY 2020, State determined levels of performance for each of the secondary and postsecondary core indicators, with the levels of performance being the same for all CTE concentrators in the State. (Section 113(b)(3)(A)(i)(I) of Perkins V)

Secondary State Determined Performance Levels (SDPL) Form
State Name: New Jersey

Indicator	Baseline Level	FY2020 Performance Level	FY 2021 Performance Level	FY 2022 Performance Level	FY2023 Performance Level
1S1: Four Year Graduation Rate	95.80	96.00%	96.25%	96.50%	97.00%
2S1: Academic Proficiency in Reading Language Arts	TBD	TBD	TBD	TBD	TBD
2S2: Academic Proficiency Math (AAMath)	TBD	TBD	TBD	TBD	TBD
2S3: Academic Proficiency in Science (AASci)	New: No baseline	New: No baseline	TBD	TBD	TBD
3S1: Postsecondary Placement (P)	TBD	TBD	TBD	TBD	TBD
4S1: Nontraditional Program Enrollment (NC)	28.41	28.34%	28.60%	28.75%	29.00%
5S1: Program Quality - Attained Recognized Credential	NA	NA	NA	NA	NA
5S2: Program Quality - Attained Postsecondary Credential	NA	NA	NA	NA	NA
5S3: Program Quality - Participated in Work-Based Learning	New: No baseline	New: No baseline	TBD	TBD	TBD
5S4: Program Quality - Other - Technical Skill Attainment	82.76	83.34%	83.50%	83.75%	84.00%

Postsecondary State Determined Performance Levels (SDPL) Form

State Name: New Jersey

Indicator	Baseline Level	FY2020 Performance Level	FY 2021 Performance Level	FY 2022 Performance Level	FY2023 Performance Level
1P1: Postsecondary Retention and Placement	82.45%	83.25%	83.30%	83.35%	83.40%
2P1: Earned Recognized Postsecondary Credential	42.28%	42.50%	43.00%	43.50%	44.00%
3P1: Nontraditional Program Enrollment	23.45%	23.45%	23.50%	24.00%	24.50%

3. Provide a written response to the comments provided during the public comment period described in section 113(b)(3)(B) of the Act. (Section 113(b)(3)(B)(iii) of Perkins V)

Public comment will be collected via a dedicated email account, PerkinsV@doe.nj.gov as well as at the following venues using a formal registration process:

Name of Venue	Location	Date
Southern Regional Institute and Educational Technology Training Center	Galloway, NJ	December 2, 2019
NJ State Board of Education Meeting	Trenton, NJ	December 4, 2019
Bergen County Community College, Meadowlands	Lyndhurst, NJ	December 6, 2019

4. Describe the procedure the eligible agency adopted for determining State determined levels of performance described in section 113 of the Act, which at a minimum shall include— a. a description of the process for public comment under section 113(b)(3)(B) of Perkins V as part of the development of the State determined levels of performance under that section as provided in the text box on the following page; b. an explanation for the State determined levels of performance; and c. a description of how the state determined levels of performance set by the eligible agency align with the levels, goals and objectives other Federal and State laws, (Section 122(d)(10) of Perkins V); and d. As part of the procedures for determining State determined levels of performance, describe the process that will be used to establish a baseline for those levels.

The process for public comment under section 113 (b)(3)(B), the State Determined Levels of Performance, will include introduction at the state board meeting, posting for public comment, availability of members of the public to comment electronically in email or through the web site, in person or by phone. Public Notice will be posted in advance of the December 4, 2019 state board meeting via the New Jersey Register.

New Jersey state levels of performance include seven required performance indicators: Four-Year Graduation Rate, Academic Proficiency in Reading Language Arts, Academic Proficiency in Math, Academic Proficiency in Science, Placement and Nontraditional Program Enrollment. It includes a Program Quality Indicator of which New Jersey has selected Participation in Work-based Learning and one optional performance indicator of Technical Skill Attainment. Data has been collected for Postsecondary credit and Postsecondary Credentials; however, the priority for the FY 2021 year is to concentrate on Work-based Learning as the Program Quality Indicator that will be the primary focus. In the subsequent years, efforts will be in place to revise definitions for the other two Program Quality Indicators and improve upon the current data collection and data analysis process. The goal for the future is to collect all three Program Quality Indicators to ensure a comprehensive picture of each program operating at each district statewide.

Under the new Perkins V legislation, New Jersey was required to revise its definition for seven of the eight performance measurements to align with the new legislation. A comparison of New Jersey Perkins IV and Perkins V Performance Definition are included below:

New Jersey Perkins V Secondary Performance Definition Comparison

Secondary Performance Indicator	Perkins IV Definition	Perkins V Legislation	Perkins V Definition
1S1 Graduation/High School Completion (G)	The number of CTE concentrators and completers who earned a high school diploma and left secondary education during the reporting year as compared to the number of CTE concentrators and completers who earned a high school diploma and left secondary education during the reporting year.	The percentage of CTE concentrators who graduated high school, as measured by (I) the four-year adjusted cohort graduation rate (defined in section 8101 of the Elementary and Secondary Education Act of 1965); and (II) at the State's discretion, the extended-year adjusted cohort graduation rate defined in such section 8101.	The percentage of CTE concentrators and completers who graduated high school as measured by the four-year adjusted cohort graduation rate as compared to the number of all CTE concentrators and completers as measured by the four-year adjusted cohort graduation rate, during the reporting year.
2S1 Academic Attainment Language Arts (AALA)	The number of CTE concentrators and completers who met or exceeded expectations of any state acceptable assessment for English to meet the graduation requirement, and who left secondary education in the reporting year.	CTE concentrator's proficiency in challenging State academic standards adopted by the State under ESEA, as measured by the academic assessments described in the section of the ACT.	The percentage of CTE concentrators' proficiency level versus the total CTE concentrators who took the state English 10 by the time they left high school with the best English 10 test result.
2S2 Academic Attainment Math (AAMath)	The number of CTE concentrators and completers who met or exceeded expectations of any state acceptable assessment for math to meet the graduation requirement, and who left secondary education in the reporting year.	CTE concentrator's proficiency in challenging State academic standards adopted by the State under ESEA, as measured by the academic assessments described in the section of the ACT.	The percentage of CTE concentrators' proficiency level versus the total CTE concentrators who took the state Algebra I by the time they left high school utilizing the highest Algebra I test result.
2S3 Academic Attainment Science (AASci)	Not included in Perkins IV.	CTE concentrator's proficiency in challenging State academic standards adopted by the State under ESEA, as measured by the academic assessments described in the section of the ACT.	The percentage of CTE concentrators' proficiency level versus the total CTE concentrators who took the state conducted science assessment by the time they left high school utilizing the best test result score.

Secondary Performance Indicator	Perkins IV Definition	Perkins V Legislation	Perkins V Definition
3S1 Placement (P)	The number of CTE completers who left secondary education the previous year with a high school diploma and whose status could be identified through the district survey and were employed, in the military, or postsecondary education as compared to the total number of CTE completers who left secondary education the previous year with a high school diploma and were identified through the district survey.	The percentage of CTE concentrators who, during the secondary quarter after exiting from secondary education, are in postsecondary education or advanced training, military service, or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C 2504(a)), or are employed.	The percentage of CTE concentrators who, in the second quarter after exiting from secondary education, are in postsecondary or advanced training, military service or a service program that receives assistance under title I of the National and Community Service Act of 1990 or are employed.
4S1 Nontraditional Concentration (NC)	**Participation Nontraditional:** The percentage represents the number of CTE participants from an underrepresented gender group who participated in a nationally recognized nontraditional program in the reporting year as compared to the total number of students who participated in a nationally recognized nontraditional program in the reporting year. **Completion Nontraditional:** The percentage represents the number of CTE concentrators from an underrepresented gender group who completed a nationally recognized nontraditional program in the reporting year as compared to the total number of CTE	The percentage of CTE concentrators in CTE programs and programs of study that lead to non-traditional fields	The percentage represents the number of CTE concentrators and completers from an underrepresented gender group as compared to all CTE concentrators and completers in a nationally recognized nontraditional program in the reporting year.

Secondary Performance Indicator	Perkins IV Definition	Perkins V Legislation	Perkins V Definition
	concentrators who completed a nationally recognized nontraditional program in the reporting year.		
5S1 Postsecondary Credential (PCL)	Not previously a performance indicator under Perkins IV.	The percentage of CTE concentrator's graduation from high school having attained a recognized postsecondary credential. WIOA: The term ''recognized postsecondary credential'' means a credential consisting of an industry-recognized certificate or certification, a certificate of completion of an apprenticeship, a license recognized by the State involved or Federal Government, or an associate or baccalaureate degree.	The percentage of CTE concentrator and completers who have graduated from high school having attained at least one recognized postsecondary credential consisting of an industry-recognized certificate or certification, a certificate of completion of an apprenticeship, a license recognized by the State involved or Federal Government, or an associate or baccalaureate degree.
5S2 Postsecondary Credit (PCT)	Not previously a performance indicator under Perkins IV.	The percentage of CTE concentrator's graduation from high school having attained a recognized postsecondary credential.	The percentage of CTE concentrators who graduated from high school having attained postsecondary credits in the relevant CTE program or program of study earned through dual or concurrent enrollment or another credit transfer agreement.
5S3 Work-based Learning (WBL)	Not previously a performance indicator under Perkins IV.	The percentage of CTE concentrators graduating from high school having participated in work-based learning. WIOA: The term 'work-based learning means sustained interactions with industry or community	Sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth,

Secondary Performance Indicator	Perkins IV Definition	Perkins V Legislation	Perkins V Definition
		professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth, firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction.	firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction. There are three levels of work-based learning experiences in order from lowest to highest: career awareness, career exploration, career training.
5S4 Technical Skill Attainment (TSA)	The number of CTE completers who took an appropriate third-party end of program assessment and passed the test as compared to the total number of CTE completers who took the test.	Optional Indicator under Perkins V.	The number of CTE completers who took an appropriate third-party end of program assessment and passed the test as compared to the total number of CTE completers who took the test.

New Jersey Perkins V Postsecondary Performance Definition Comparison

Postsecondary Performance Indicator	Perkins IV Definition	Perkins V Legislation	Perkins V Definition
1P1 Retention/ Placement (RP)	**Retention:** The number of postsecondary concentrators enrolled in the previous year and did not earn a degree or credential who remain enrolled in postsecondary education during the reporting year as compared to the total number of postsecondary concentrators enrolled in the previous year who did not earn a degree or credential. **Placement:** The number of postsecondary students who completed the CTE program and in the second quarter following the program year in which they graduated, were identified with their valid social security numbers as placed or retained employment.	The percentage of CTE concentrators who, during the secondary quarter after program completion, remain enrolled in the postsecondary education, are in advanced training, military service, or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C 2504(a)), or are placed or retained in employment.	The number of postsecondary concentrators who, during the second quarter after program completion, qualify as at least one of the following: remain enrolled in postsecondary education, enrolled in advanced training, serving in the military, or a service program that receives assistance under title I of the National and community Service Act of 1990, Volunteer of the Peace Corps, or placed or retained in employment.
2P1 Credential (C)	The number of CTE concentrators who left postsecondary education and who received an industry recognized credential, a certificate, or a degree during the reporting year, as compared to the number who left postsecondary education during the reporting year.	The percentage of CTE concentrators who received a recognized postsecondary credential during participation in or within 1 year of the program completion.	The number of CTE concentrators or completers who received an industry recognized credential or certificate of completion in a CTE program during participation or within 1 year of the CTE program completion, as compared to the total number of CTE concentrators who left postsecondary education during the reporting year.

Postsecondary Performance Indicator	Perkins IV Definition	Perkins V Legislation	Perkins V Definition
3P1 Nontraditional Concentration (NC)	**Participation Nontraditional:** The number of nontraditional CTE students enrolled in the program as compared to the total number of CTE students enrolled in the program. A program is considered nontraditional if the under-represented gender comprises less than 25 percent of individuals employed in the occupation or field of work. Nontraditional fields are determined on a national level and not on the local level. **Completion Nontraditional:** The number of nontraditional CTE students who completed the program as compared to the total number of CTE students who completed the program. A program is considered nontraditional if the under-represented gender comprises less than 25 percent of individuals employed in the occupation or field of work. Nontraditional fields are determined on a national level and not on the local level.	The percentage of CTE concentrators in CTE programs and programs of study that lead to non-traditional fields	The number of nontraditional CTE concentrators and completers in nontraditional CTE programs as compared to the total number of CTE concentrators and completers in the nontraditional CTE program. A program is considered nontraditional if the under-represented gender comprises less than twenty-five percent of individuals employed in the occupation or field of work.

Postsecondary Performance Indicator	Perkins IV Definition	Perkins V Legislation	Perkins V Definition
Technical Skill Attainment	The number of CTE completers who took an appropriate third-party end-of-program assessment and passed the test as compared to the total number of CTE completers who took the test.	Not included.	Not included.

The revision or new definition of seven of the eight performance indicators has presented a challenge for determining performance level targets. Academic Proficiency in Reading Language Arts, Math and Science, and graduation have all been aligned with the revised New Jersey Student Learning Standards and the new statewide assessment. The adoption of the statewide assessment has drastically changed performance results and therefore revision to targets must be reevaluated.

Current State Determined Performance Levels

Secondary State Determined Performance Levels (SDPL) Form

State Name: New Jersey

Indicator	Baseline Level	FY2020 Performance Level	FY 2021 Performance Level	FY 2022 Performance Level	FY2023 Performance Level
1S1: Four Year Graduation Rate	95.80	96.00%	96.25%	96.50%	97.00%
2S1: Academic Proficiency in Reading Language Arts	TBD	TBD	TBD	TBD	TBD
2S2: Academic Proficiency Math (AAMath)	TBD	TBD	TBD	TBD	TBD
2S3: Academic Proficiency in Science (AASci)	New: No baseline	New: No baseline	TBD	TBD	TBD
3S1: Postsecondary Placement (P)	TBD	TBD	TBD	TBD	TBD
4S1: Nontraditional Program Enrollment (NC)	28.41	28.34%	28.60%	28.75%	29.00%
5S1: Program Quality - Attained Recognized Credential	NA	NA	NA	NA	NA
5S2: Program Quality - Attained Postsecondary Credential	NA	NA	NA	NA	NA
5S3: Program Quality - Participated in Work-Based Learning	New: No baseline	New: No baseline	TBD	TBD	TBD
5S4: Program Quality - Other - Technical Skill Attainment	82.76	83.34%	83.50%	83.75%	84.00%

Postsecondary State Determined Performance Levels (SDPL) Form

State Name: New Jersey

Indicator	Baseline Level	FY2020 Performance Level	FY 2021 Performance Level	FY 2022 Performance Level	FY2023 Performance Level
1P1: Postsecondary Retention and Placement	82.45%	83.25%	83.30%	83.35%	83.40%
2P1: Earned Recognized Postsecondary Credential	42.28%	42.50%	43.00%	43.50%	44.00%
3P1: Nontraditional Program Enrollment	23.45%	23.45%	23.50%	24.00%	24.50%

Determining State Levels of Performance is a collaborative process between the Office of Career Readiness, the Office of Academics and Performance and stakeholder groups such as the statewide Career and Technical Education Advisory Board. The process for determining targets for Four Year Graduation Rate, Academic Achievement Language Arts and Reading, Math and Science will be determined by evaluating the last three years of data and applying targets as defined by the New Jersey ESEA Plan. Placement will be determined by averaging the last three years of data and determining a reasonable growth target that New Jersey would like to achieve.

5. Describe how the eligible agency will address disparities or gaps in performance as described in section 113(b)(3)(C)(ii)(II) of Perkins V in each of the plan years, and if no meaningful progress has been achieved prior to the third program year, a description of the additional actions the eligible agency will take to eliminate these disparities or gaps. (Section 122(d)(11) of Perkins V)

The NJDOE Office of Career Readiness will analyze data on the core indicators of performance to identify gaps in performance at state, county and local levels through the annual Perkins application process. During this annual analysis, LEAs are tasked with analyzing performance in all programmatic areas with the support of their assigned Office of Career Readiness Perkins Program Officer. If any eligible recipient has gaps or deficiencies, and if no meaningful progress has been made after a year, the Program Officer(s) will meet with the LEA and determine research-based interventions to support the targeted needs. The LEA will craft an action plan to address the gaps within 30 days of the meeting, identifying the gaps in programmatic levels, the specific identified action steps based on research, and the funding allocations required. The Perkins Officer and the LEA will both sign off in agreement on the action plan, which includes a specific portion of the annual allocation to be spent on enacting the plan. The plan will remain in place until the gaps in performance have been resolved.

Perkins Program Officers at the NJDOE will meet with their peer colleagues in each county and conduct a trend analysis, sharing the action plans in place throughout their counties. They will craft and enact technical assistance and professional development offerings to support common needs, leveraging partnerships and expertise from other internal NJDOE offices (The Office of Special Education, Bilingual Education, etc.) as well as external partners based on their findings.

Works Consulted

Alfeld, C., Charner, I., Johnson, L., & Watts, E. 2013. Work-based learning opportunities for high school students. Louisville, KY: National Research Center for Career and Technical Education, University of Louisville.

Carnevale, A., Smith, N., & Strohl, J. 2013. Recovery: Job growth and education requirements through 2020. Georgetown University Center on Education and the Workforce

Carnevale, A.; Strohl, J.; Ridley, N.; and G. Artem. 2018. Three Educational Pathways to Good Jobs: High School, Middle Skills, and Bachelor's Degree. Georgetown University Center on Education and the Workforce

Cardoso, P., Janeiro, I., & Duarte, M. 2017. Life Design Counseling group intervention with Portuguese adolescents: A process and outcome study. Journal of Career Development 44, 1–14

Carroll, T. & E. Foster. 2009. Learning Teams: Creating What's Next. National Commission on Teaching and America's Future. Washington, D.C.

Castellano, M.; Stone, J.R.; and S. Stringfield. 2005. Earning Industry-Recognized Credentials in High School: Exploring Research and Policy Issues. Journal of Career and Technical Education 21: 2, 7-34.

Castellano, M., Sundell, K. E., Overman, L. T., Richardson, G. B., and Stone, J. R. III. April 2014. *Rigorous tests of student outcomes in CTE programs of study: Final report.* Louisville, KY: National Research Center for Career and Technical Education

Connelly, N. 2009. CTE: Education for a Strong Economy. National Association of State Directors of Career Technical Education

DePaoli, J.L.; Balfanz, R.; Atwell, M.N.; and J. Bridgeland. 2018. Building a Grad Nation: Progress and Challenge in Raising High School Graduation Rates. Annual Update 2018

Egalite, A., & Kisda, B. 2017. The effect of teacher match on students' academic perceptions and attitudes. Educational Evaluation and Policy Analysis 40:1, 59-81

Field, S.; Hoeckel, K.; Kis, V.; & M. Kuczera. 2010. Learning for Jobs. OECD Reviews of Vocational Education and Training

Gagnon, D. & M. Mattingly. 2016. Most U.S. School Districts Have Low Access to School Counselors: Poor, Diverse, and City School Districts Exhibit Particularly High Student-to-Counselor Ratios. The Carsey School of Public Policy at the Scholars' Repository: 286

Garcia, E. & E. Weiss. 2019. The Teacher Shortage is Real, Large and Growing, and is Worse than We Thought. Economic Policy Institute. Washington, D.C.

Gestsdottir, Bowers, von Eye, Napolitano, & Lerner, 2010. Intentional self regulation in middle adolescence: The emerging role of loss-based selection in positive youth development. Journal of Youth and Adolescence 39:7, 764–782

Hartung, P. & S. Santilli. 2018. My Career Story: Description and Initial Validity Evidence. Journal of Career Assessment 26:2

Holle, T. 2012. Effective & Sustainable: Business and Industry Partnerships. Techniques: Connecting Education and Careers 87:8, 20-24

Holzer, H. and S. Baum. 2017. Making college work: pathways to success beyond high school. Washington, D.C.: Brookings Institution Press

Hyslop, A. 2009. Fostering Partnerships between Education, Business and Industry. Techniques: Connecting Education and Careers 84: 5, 42-43

Jocson, K. 2015. I Want to Do More and Change Things: Reframing CTE Toward Possibilities in Urban Education. Urban Education

Sutcher, L.; Darling-Hammond, L.; and D. Carver-Thomas. 2016. A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S. Learning Policy Institute

Lombardi, A.; Dougherty, S. and J. Monahan. 2018. Students with Intellectual Disabilities and Career and Technical Education Opportunities: A Systematic Literature Review. Journal of Disability Policy Studies 29:2, 82-96

Lynch, R., & P. Oakford. 2014. The economic benefits of closing educational achievement gaps. Center for American Progress

Manley, A. 2012. Keeping up with business and industry: secondary-level career and technical education's struggle. On the Horizon 20:1, 17-23

Mau, C.; Li, J. & K. Hoetmer. 2016. Transforming High School Counseling: Counselors' Roles, Practices, and Expectations for Students' Success. Administrative Issues Journal: Connecting Education, Practice, and Research, 6: 2: 83-95

National Association of College Admission Counseling & American School Counselors Association. 2018. NACAC and ASCA State-by-State Student-to-Counselor Ratio Report

Plasman, J. and M. Gottfried. 2016. Applied STEM Coursework, High School Dropout Rates, and Students with Learning Disabilities. Educational Policy Sage Publications

Schulte, M.; Custard, H.; Cunningham, M.; Major, D.; Murray, A. & A. Stone. 2017. The Career Pathways Landscape: Policy, Partnership, and Association Impact in Higher Education, The Journal of Continuing Higher Education 65:1, 64-69

Symonds, William C., Robert Schwartz, and Ronald F. Ferguson. 2011. Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century. Cambridge, MA: Pathways to Prosperity Project, Harvard University Graduate School of Education.

Turner, A. 2018. The business case for racial equity: A strategy for growth. W.K. Kellogg Foundation. Retrieved from http://ww2.wkkf.org/2018/bcfre/BCRE-National-Report.pdf

U.S. Department of Education. 2017. Teacher Shortage Areas Nationwide Listing. 1990–1991 through 2017–2018

Walker, R and A. Farmer. 2018. The Impact of a Career and Technical Education on the Graduation Rates and College Enrollment of High School Students. The Journal of Academic Development and Education (10).

Wilkin, T. & G. Nwoke. 2011. Career and Technical Education Teacher Shortage: A Successful Model for Recruitment and Retention. Journal of STEM Teacher Education 48:1

Zins, Bloodworth, Weissberg, & Walberg, 2007. The Scientific Base Linking Social and Emotional Learning to School Success 17:2-3, 191-210

Zinth, J. and E. Barnett. 2018. Rethinking Dual Enrollment to Reach More Students. Promising Practices. Denver, CO: Education Commission of the States

Appendix A: Local Plan Template

Section A:

1) Describe the results of the Comprehensive Local Needs Assessment (CLNA) and how the results of the CLNA will inform the CTE programs and activities to be funded.

2) For each career and technical education (CTE) course offering and the activities that will be funded, select how the required uses of funds as detailed in Section 135(b) will:

   a) Strengthen student's academic and career technical skills by integrating academics and CTE
   b) Link CTE at the secondary and postsecondary level through programs of study
   c) Provide students with strong experience and understanding of all aspects of an industry
   d) Develop, improve or expand the use of technology
   e) Provide professional development to teachers, administrators and career guidance counselors
   f) Develop and implement evaluation of the CTE programs carried out with Perkins funds, including assessment of meeting the needs of special populations
   g) Initiate, improve, expand and modernize quality CTE programs
   h) Provide services that are of sufficient size, scope and quality to be effective
   i) Provide activities to prepare special populations enrolled in CTE programs for high-skill, high-wage, in-demand occupations that lead to self-sufficiency

Section B:

Descriptively list the action you plan to take to ensure you will be able to progress toward your goal. Action steps are strategies and interventions which should be research-based and include professional development, new technology and equipment. Special populations must be addressed as applicable.

For each action step, identify a timeline, evaluation strategy, line item, funding amount, and anticipated outcome. Revisions will be made once the application is approved.

Appendix B: Comprehensive Local Needs Assessment

The Comprehensive Local Needs Assessment aims to translate the language of the law into concrete, actionable steps for conducting a rigorous needs assessment that meets the *Strengthening Career and Technical Education for the 21st Century Act (Perkins V)*.