



Education Strategy Group

ACHIEVING GREATER IMPACT

MCPS Career Readiness Expert Review

Findings and
Recommendations
September 12, 2017

Context for External Career Readiness Review

Reasons to Reflect, Re-Assess, & Re-Strategize in K-12

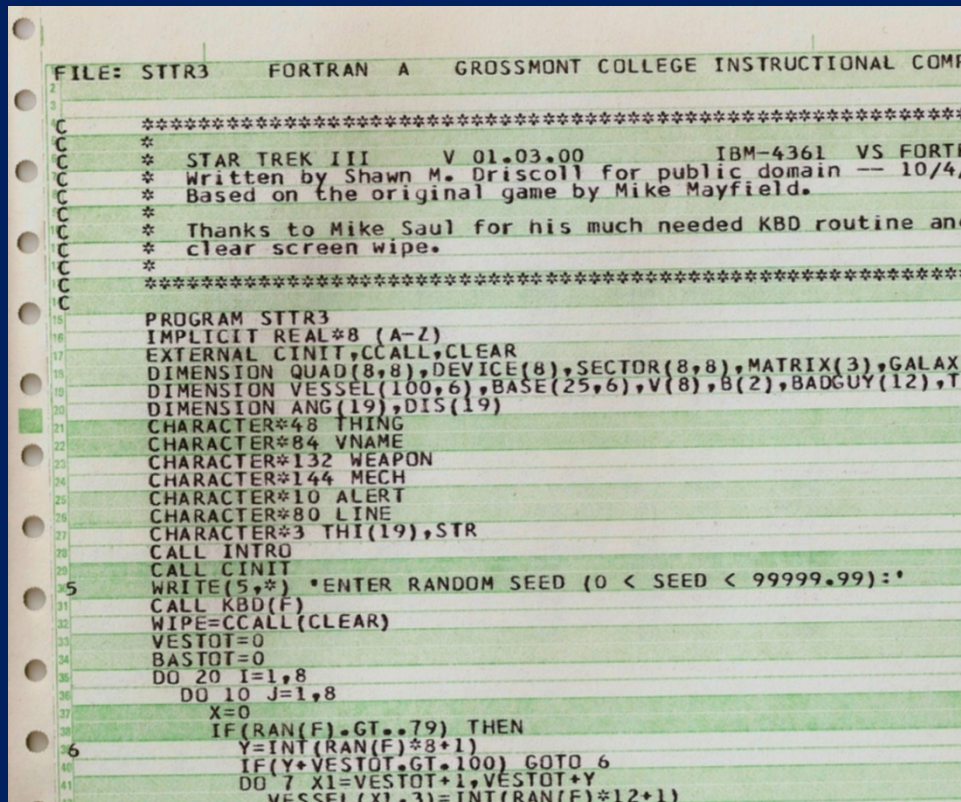
**The Economy
Has Changed**

**College Has
Changed**

**Career
Opportunities
Have Changed**

The Economy Has Changed

We've heard this before; The same jobs require new, more sophisticated skills – and more of them - to be successful in the workforce



- Then: Fortran, Isolated Need



- Now: SQL/JAVA, Exponential Need

The Economy Has Changed

We've heard this before; The same jobs require new, more sophisticated skills – and more of them - to be successful in the workforce



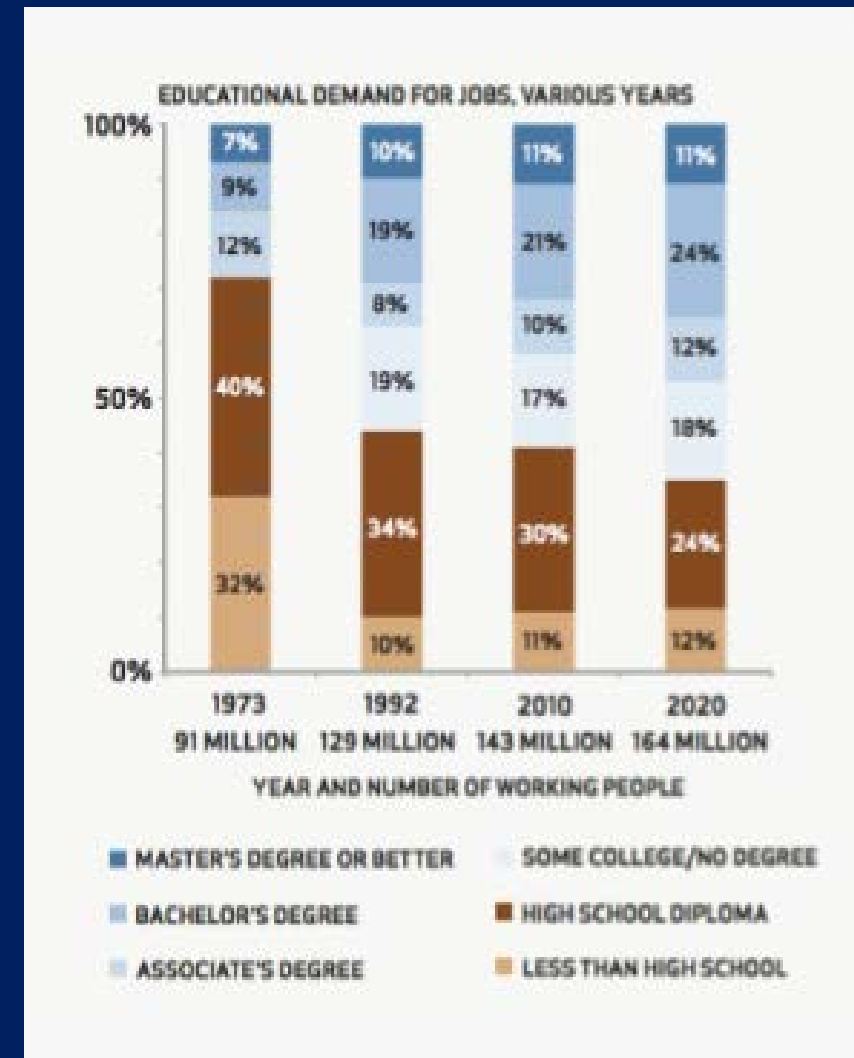
- Then: Mechanic



- Now: Technician

The Economy Has Changed

- We've heard the drumbeat that a college education is the key to economic and career success
 - 2/3 of all jobs will require some level of postsecondary education and training by 2020



The Economy Has Changed

But there are 2 critical descriptors missing from this conversation that impact the work of schools:

Rate of Change

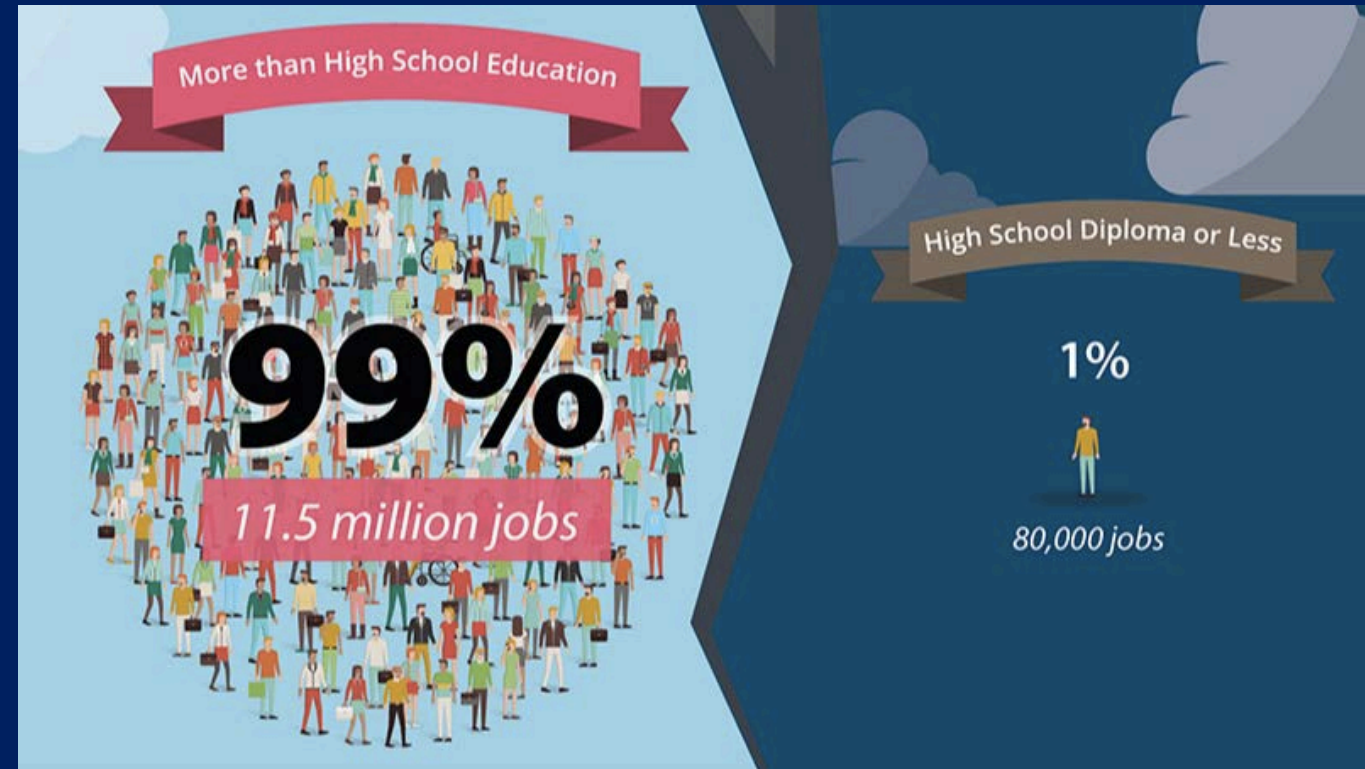
- These changes in our economy are occurring very rapidly

Breadth of Change

- The economy is defining postsecondary success much more broadly than it traditionally has

The Economy Has Changed

- According to [Georgetown CEW](#):
 - Great Recession largely eliminated clerical and blue-collar jobs, replacing them with higher-skill managerial and professional jobs.
 - 99% of the jobs added in the Recovery went to those with some postsecondary education or training.
 - Greatest number of newly-created jobs were in Business Management, Healthcare, and Technical fields



College Has Changed

At the same time, the challenges of college continue to grow for students and their families, including:

- Higher costs
- Increased student debt
- More students working
- Slower paths to completion

\$20k

Average annual cost of in-state public 4-year college

\$45k

Average annual cost of private, non-profit 4-year college

\$37k

Average student debt for 4-year college (2/3 take out loans)

40%

Students who earn bachelor's degree within 4 years (59% for FTFT in 6 yrs)

40%

Undergraduates who work ≥ 30 hours/week while in school

\$3.5k

Average annual cost of public 2-year college

30%

Associate degree holders who earn more \$\$ than bachelor degree holders

Career Opportunities Have Changed

- **Past Generations**: route to middle and upper class was through college
 - Bachelor's degree in almost any field = financial stability and prosperity
 - High school diploma = stable blue and white collar jobs that paid a good salary
- **Today's Generation**: Technology and globalization have changed the labor market making more room for skilled, technical, postsecondary-level workers and less room for other workers. Recent average salaries:
 - Bachelor's Degree in [Electrical Engineering](#): \$98,620
 - [Associate's Degree in IT](#): \$66,130
 - [1-year IT Certificate](#) : \$58,990
 - [Bachelor Degree](#) across fields: \$54,000
 - Bachelor's Degree in [Psychology](#): \$37,980
 - High School [Diploma](#): \$35,256
 - **LIVING WAGE IN DC REGION: \$42,000**

Career Opportunities Have Changed

- **The notions of college readiness and career readiness are blurring:**
 - Individuals can succeed in similar ways through attainment of long-term postsecondary certificates, associate degrees, or bachelor degrees
- **But their college major choices matter:**
 - Liberal Arts or General Business majors are 2-3 times more likely than those with Nursing or Engineering majors to be underemployed.
 - Associate degree holders in technical fields often make more money than bachelor degree holders in less-quantitative fields.

MCPS Has Been Ahead of This Economic Curve

Relentless Focus

- Preparing Students for College

Prioritization of Time & Resources

- AP, IB, Honors Course Taking

Dedicated Attention

- SAT/ACT Scores
- Naviance College Planning Tool

Postsecondary Preparation Challenge Facing MCPS



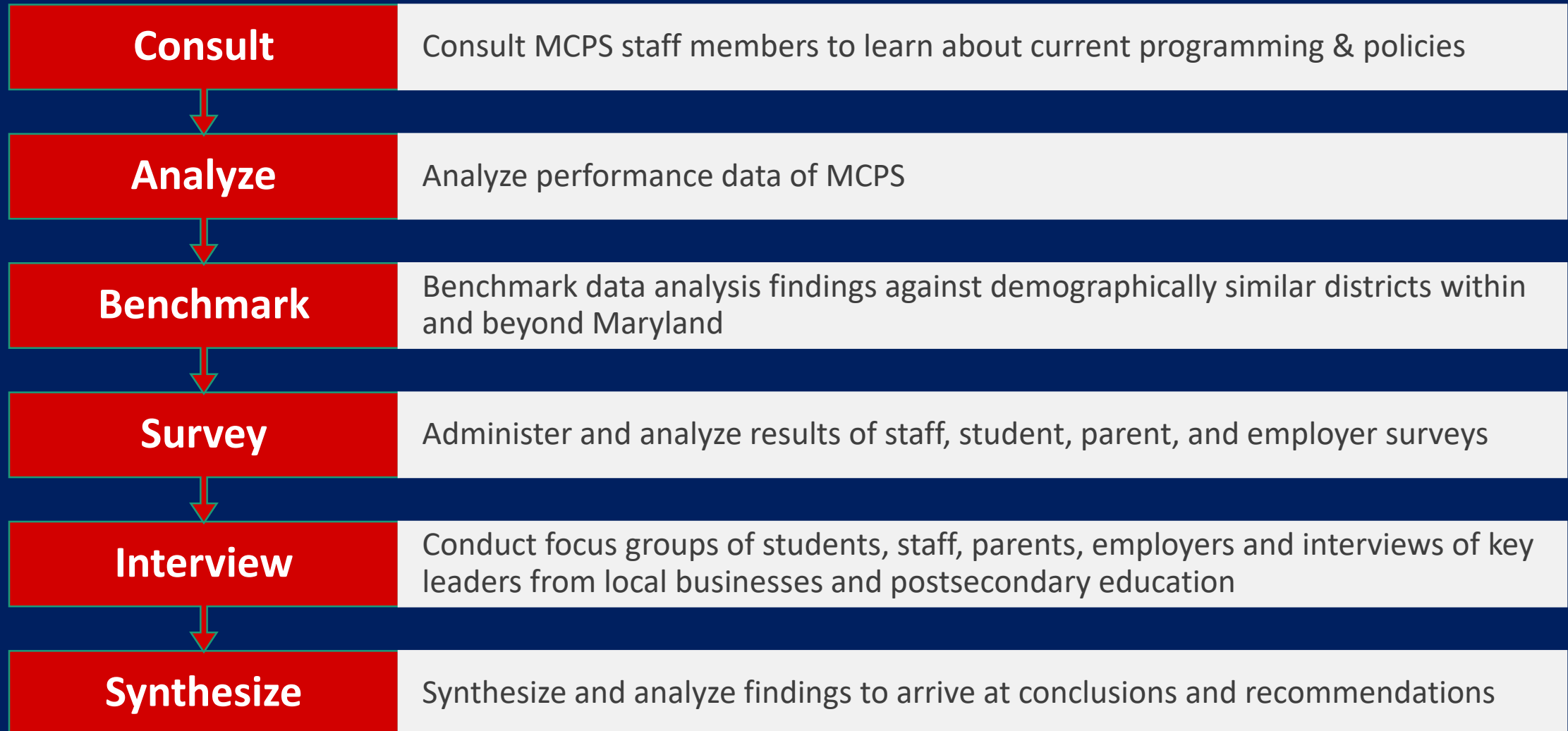
★ ALL MCPS GRADUATES

ESG's Process and Findings

ESG's Charge from MCPS:

Rigorously assess MCPS's career readiness efforts, including CTE Programs of Study (POS), to determine the extent to which they are demand-driven, shaped by employers, rigorous and relevant, fully utilized, and effective vehicles for preparing all students for postsecondary success

ESG's Analytical Process



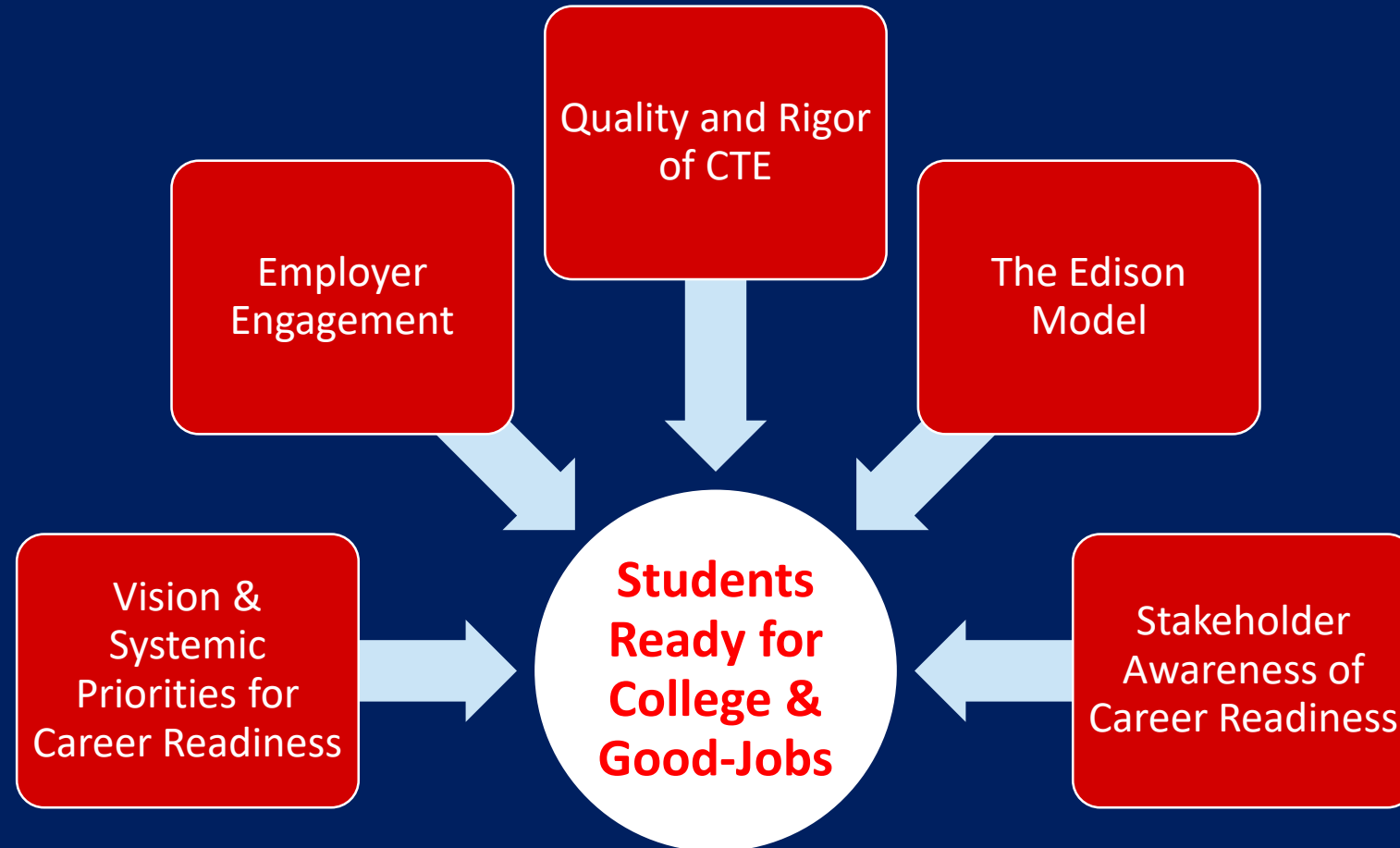
Key Outcomes of ESG's Data Analysis

- **29% of MCPS students enroll in a CTE course**
 - Below the state average, Anne Arundel, Baltimore County, Frederick, Howard
- **CTE enrollment is declining in MCPS**
 - It is rising in all comparison districts
- **18% of MCPS students are CTE concentrators and 10% are completers**
 - This lags behind all Maryland comparison districts
- **MCPS completers score lower than peers on nearly all other performance metrics**
 - But they do earn IRCs at higher levels than their MCPS peers
- **Few 2016 MCPS graduates took advantage of non-AP college opportunities**
 - 4.6% earned DC; 6.4% earned IRCs; 7.1% scored 4+ on IB exam; 20% participated in an internship
- **CTE completers in MCPS lack readiness for the University System of Maryland**
 - 31.3% met requirements compared to the state average of 58.1%

Key Outcomes of Stakeholder Surveys

- **Clear consensus** among students, parents, staff that students must continue education and training beyond high school
 - 62% students, 77% parents, 63% teachers/admin, 56% counselors “strongly agree”
- Knowledge of future economic credential demands is **underdeveloped**
- **Large appetite** for more information on career prep opportunities in MCPS
 - 80% of students/parents and 90% of staff believe more information is needed
- Some counselors feel **uneasy** about supporting student career planning
 - 1/3 indicated they do not understand opportunities for students after high school
- **Few** students/parents are interested in Edison as it currently stands
 - 15% of students/10% of parents
- **Overwhelmingly**, business/industry want to help MCPS’s efforts

Five Categories of Project Key Findings



Focus Area 1: Vision & Systemic Priorities for Career Readiness

- + **High Expectations**: District administrators & school-based staff are clearly committed to high expectations and outcomes for all students
- **Narrow Focus**: Those high expectations are almost exclusively aimed at a 4-year college experience after high school, which, while very important, marginalizes career preparation efforts and undervalues dual college-ready AND career-ready accomplishments.
- **Checkbox Approach**: The strong focus on preparing for 4-year college has also contributed in part to checking off graduation requirements rather than thinking more strategically about students' futures and how their high school experience can shape that.
- **Fragmented Organization**: This gap in strategic vision can be attributed in part to both educators' lack of experience with high-quality, 21st century career preparation and the fragmented way in which CTE is situated in the district office; it's a division without a home that lacks clear direction.
- **Signaling Priorities**: System drivers and accountability continue to emphasize raising the graduation and 4-year college-going rates. Absent from metrics are high-quality career readiness indicators that can and should play a complementary role in MCPS's work.

Focus Area 2: Employer Engagement

- + **Strong Recognition**: MCPS clearly recognizes the need to meaningfully engage key employers to ensure alignment between programs and the economic development needs of the county to prepare students for future opportunities.
- **Limited Connection**: Yet it lacks a systemic way in which to connect with the employer community. Instead, existing intermediary organizations serve different purposes and functions, which has created fragmented engagement and confusion among employers.
- **Not Yet Employer-Led**: While MCPS consistently engages employers through several channels, employers feel they are being informed rather than empowered to help shape and assess policies and programs.
- **Underdeveloped Real-World Tie**: Beyond the challenges of engaging employers at the policy level, employers are underutilized in connecting classroom learning with the world of work.
- **Employer K-12 Attitude**: Employers seem to largely undervalue K-12, often perceiving it as a philanthropic endeavor rather than a talent-development strategy.

Focus Area 3: Quality and Rigor of CTE

- + **Strong Building Blocks**: MCPS should rightfully boast that it has POS that are anchored in IRCs; a technical career advisement platform; school-based internship coordinators; and dedicated staff, all of which are needed to create a high-quality, district-wide career preparation system.
- **Uneven POS Distribution**: Yet the Programs of Study (POS) are offered unevenly across the district with a smorgasbord popping up within schools seemingly without intentionality, creating equity, awareness, and interest challenges. This contributes to students and parents often perceiving POS as having limited value.
- **Lack of Postsecondary Link**: High-quality POS must include postsecondary-level instruction. This requires a shared vision for a 9-14 delivery system inclusive of dual enrollment/credit and opportunities for attainment of postsecondary-level IRCs that is currently underdeveloped.
- **Underdeveloped POS Components**: Further, neither work-based learning nor career advisement have been optimized to date. Though the high school internship program has impressive potential, it lacks coordination, clear standards, and industry-aligned opportunities. And, important functionality of Naviance for career planning beginning in middle school is underutilized, though good early work is happening.
- **Limited CTE Market Share**: As a contextual challenge to address, CTE is inherently at a disadvantage for enrollees. It is often viewed as one elective of many choices rather than a pathway to a valuable postsecondary opportunity.

Focus Area 4: Edison School of Technology

- + **Clear Focus**: Edison consistently demonstrates a relentless focus on preparing students for specific career opportunities after high school.
- **Unknown Opportunity**: Edison is largely unknown, with stakeholders holding only a vague idea of what the school does and how well it does it.
- **Quality Perception**: Stakeholders express concern that it is a “lesser-than option” for students who don’t plan to go to college.
- **Problematic Model**: Students and parents are largely unwilling to lose a class period daily to travel to a part-time program that offers a partial high school experience.
- **Lack of Vision**: There doesn’t appear to be a common vision for how Edison fits into the broader MCPS strategy, and there is similar confusion regarding how the new Edison will be different.

Focus Area 5: Stakeholder Awareness

- + **Belief in Postsecondary Value**: MCPS Students, parents, faculty, and staff uniformly understand and believe in the value of a 4-year college degree.
- **Misunderstanding of Economic Opportunity**: Across all MCPS stakeholders – students, parents, teachers, counselors, administrators - there is little awareness of how labor market shifts have created a more diverse range of economic and career opportunities, especially valuable “new-collar” jobs.
- **Scarcity of Information**: Relatedly, because little information on career preparation for these opportunities has made its way to students, teachers, counselors, and parents, there is a discernible lack of understanding regarding career readiness and its goals.
- **Limited Understanding of CTE**: Most stakeholders don’t understand what CTE is, often associating it with outdated vocational education. Yet they cite programs like NAF, PLTW, and Cisco as being very strong college prep opportunities without knowing that they are CTE programs of study. Students, parents, faculty, and staff generally lack understanding of CTE and how high-quality CTE can be an effective strategy to prepare students for college.

Career Readiness Recommendations for MCPS

Guiding Principles for Recommendations

Clear & Rigorous Goal

- Every student must graduate from MCPS with the **knowledge and skills to be ready for college and “good jobs”**

Role of CTE

- **This is about career readiness**, a broad set of experiences that prepare all students for economic and career success; CTE is an important lever, but not the sole focus, of a comprehensive strategy

Career-Ready is College-Ready

- **This is not about tracking students into one path**; it is about preparing all students for the full range of valuable postsecondary options from which they can choose their own best fit

Imperative Partnerships

- **MCPS cannot tackle this alone.** It must lock arms with the postsecondary and employer communities to reach this goal

Focus Area 1 Recommendations: Vision & Systemic Priorities for Career Readiness

First and foremost, MCPS must take steps to establish career readiness as a priority in preparing students for postsecondary success. Each of the steps articulated below requires committed partnership with industry and postsecondary leaders.

- **Establish a New Vision for Career Readiness** that compliments MCPS's college-ready goals.
- **Redefine and Rebrand CTE** as offering rigorous academic coursework integrated with 21st century technical instruction and real-world work experiences.
- **Design and Provide Professional Development** on the regional labor market to educators, counselors, teachers, and administrators on high-value career opportunities within the region.
- **Establish Metrics for Career Readiness Success** to undergird the importance of the work, including POS completion in high-skill, high-demand fields; work-based learning participation; dual credit rates; and attainment of IRCs.

Focus Area 2 Recommendations: Employer Engagement

Employers must become strong partners in realizing this new vision of career readiness, which includes giving them the opportunity to identify Programs of Study that should be prioritized and scaled and assess their effectiveness.

- **Convene Leading Employers**: To accomplish this, the superintendent should regularly convene leading industry executives via a specialized Advisory Council to identify programmatic priorities for the district and set the direction for the work of the current intermediary organizations.
- **Restructure MCCB**: This will then provide opportunity to redefine the role of the MCCB to carry out the recommendations of the Superintendent's Advisory Council so it can play a more effective role in ensuring that programs are targeted in the right career sectors and are achieving results.
- **Single Point of Contact**: Finally, a "Director of Strategic Industry Partnerships" is needed to manage the work of the Council and build a full portfolio of work-based learning experiences for students.

Focus Area 3 Recommendations: Quality and Rigor of Career Programming

Once the new vision has been established, MCPS must strengthen the quality and consistency of its career programming ensuring that POS are rigorous and enable students to graduate with college credit and postsecondary-level IRCs.

- **Systematic Approach**: Leveraging the work of the Advisory Council, design and execute a systematic approach to the delivery of career programming across schools, ensuring that every student has access to a high-quality POS of his/her choice.
- **POS Quality**: To achieve quality, redesign POS offering honors and college-level course-taking opportunities through grade 14; identify students' academic and career interests, and integrate work-based learning experiences aligned with those interests.
- **Organizational Structure**: Leadership matters in charting new direction; reorganizing CTE under one central leader with deep knowledge of the district's academic and technical priorities and the acumen to execute on the new career readiness vision will be pivotal.
- **Accountability Redesign**: To drive changes in quality and practice, reconfigure MCPS's accountability system so that it values completion of high-quality POS and attainment of college credit and stackable IRCs.

Focus Area 4 Recommendations:

Re-invention of Edison School of Technology

The newly-built Edison gives opportunity for change and reinvention. MCPS should take this opportunity to address shortcomings in the current model, situating the new school as an integral piece of the career readiness vision. There are four paths to consider, each of which requires conversion into a full-time school:

- **CTE Early College High School**: Like other ECHS, this model would enable students to simultaneously earn a high school diploma and either an associate's degree or up to two years of credit toward a bachelor's degree. With an exclusive focus on high-skill, high-demand industry sectors, students could also earn a postsecondary-level IRC.
- **Wall-to-Wall Career Academy**: Under this model, the school would be divided into a number of high-skill, high-demand "academies"; each student would "major" in an academy and receive rigorous academic and technical instruction culminating in college-credit and a postsecondary IRC.
- **Combined Model**: MCPS might take advantage of the natural opportunity of side-by-side campuses by combining Wheaton and Edison High Schools to offer a rigorous project-based learning experience alongside sophisticated hands-on technical instruction.
- **Technology High School**: Perhaps the simplest high-potential transformation would be converting Edison into a fulltime technical high school. To achieve stronger results and higher enrollment, programmatic offerings and their quality would need to be assessed carefully and a strategic plan for implementation be developed with postsecondary and industry partners.

Focus Area 5 Recommendations: Stakeholder Awareness of Career Readiness

Once these other pieces are in place, MCPS must clearly, strongly, and widely communicate to help stakeholders understand the importance of its career readiness work. This can happen through deliberate phasing:

- **Stage 1: Generate Understanding**: MCPS must establish a new value proposition through an external communications/branding campaign that educates stakeholders on recent economic changes and the related implications for career opportunities.
- **Stage 2: Raise Awareness of Vision**: Next, that branding campaign should bring to life MCPS's new vision of career readiness that integrates and values career preparation alongside college preparation.
- **Stage 3: Make a Case for CTE**: Finally, that branding campaign will need to establish the link between high-quality CTE and career readiness, explaining what CTE entails, delineating CTE offerings and their connection to postsecondary options, targeting long-held misconceptions about CTE quality, and advertising recent CTE changes to ensure unassailable quality.

NEXT STEPS

1. **A cross-district MCPS team will be created to develop a comprehensive action plan** which maps short- and long-term implementation strategies for the ESG recommendations.
2. As part of that strategic planning process, the team will **identify high-priority, short-term recommendations with minimal budgetary impact** to implement during the 2018–19 school year. **A multi-year long-term plan will also be created** during the 2017–18 school year.
3. **The team will gather input and feedback** from key stakeholders on the short- and long-term career readiness implementation plan.
4. **An update will be provided to the Board of Education** on the status of the development of the short- and long-term action plans in the Spring of 2018.