



MDC

Made in Durham

Building an Education-to-Career System

October 2012



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Preface

Late last year, David Dodson and the MDC Board of Directors invited us to join a panel on Disconnected Youth in Durham. Since then, we have met regularly to help guide research, challenge assumptions, and, we hope, enrich emerging recommendations with our experience and expertise. We are a diverse group from business, academia, criminal justice, community and economic development, and social enterprise. But we share a passionate commitment to Durham and a conviction that every Durham youth and young adult is entitled to a first-rate education—an education that prepares them for successful adulthood and the good jobs in our labor market.

We are struck by a Durham paradox. We have shed our image as a crime-ridden place of forgotten tobacco jobs. Today we are a center of culture and creativity, of science and medicine, of new businesses, social enterprise, and community action. We have, as the local campaign admonished us to do, “found our cool.”

Yet, some of the facts behind this image are deeply troubling. As our report makes clear, too many of our youth and young adults are struggling to make it through education and into a rewarding career. Too many are ending up as members of the working poor. Too many have disengaged from school or disconnected from our economic and social networks altogether. Most disturbing, the victims of Durham’s opportunity gap are mostly young men and women of color. The situation belies Durham’s recent designation as the nation’s most tolerant city.

Our report addresses both system and program improvements that are critical to serious and sustained change over the next five years. We propose an education-to-career system that serves *all* Durham youth and young adults—those on track, those who are behind, and those who are disconnected—because, they are *all* entitled to the best education, training, and personal support that we can provide. At the same time, given the deep concern we have for the most disconnected youth, most of whom are African American and Latino, we believe strongly that the basic yardstick of the system’s value must be that it works as well for the most disconnected young person as it does for the most privileged.

The education and career system we envision cannot be achieved by one sector or institution alone. Its success will depend on our public and elected officials, our business executives, our faith and community leaders, and our program operators and grassroots activists working together with determination, creativity, and courage. It will require strategic investments of resources—funds, people, expertise—from the public, private, and philanthropic sectors. And it will require the active leadership of our youth and young adults in shaping the programs and services that will, in turn, shape their own futures.

Throughout this initiative, we have sensed a strong appetite for change—a sense that this is a special moment in time, and that Durham must act now before we place another generation of our young people at risk. We hope you will join us in this important undertaking.

Elaine Bushfan, Judge, North Carolina Superior Court, District 14B, Durham County
Arnold Dennis, Executive Director, Juvenile Justice Institute of North Carolina Central University
Martin Eakes, CEO, Center for Community Self-Help
Michael Goodman, Vice President for Real Estate, Capitol Broadcasting Company
Ivan Parra, Lead Organizer, Durham CAN (Congregations, Associations, Neighborhoods)

Executive Summary

Durham is thriving. We have a strong employer base, we are not short of good jobs, and our employment growth rate is projected to outstrip the state and the U.S. by 2021. Yet too few of our young people are getting these good jobs, and too few have the academic and workplace skills to compete with more qualified candidates from other cities and states. We may not be able to change the market, but we can build a system that equips our youth and young adults with the skills necessary for rewarding careers in the Triangle. We can build a “Made in Durham” pipeline of education and training that assures our young people are as qualified as any newcomer.

We are far from that position today. Roughly 40 percent of Durham’s youth and young adults are not on-track to complete high school, achieve a postsecondary credential of some kind, and gain employment by the time they are 25. A substantial number will struggle in the process and some will not make it at all. There are now between 4,500 and 6,000 disconnected youth—enough to fill four Durham high schools—who are either at significant risk of dropping out of high school or who are not pursuing any education, training, or employment. All of them have talent and the aspiration for a better life. Together, they represent a source of workforce skills, civic participation, and taxpayer revenue that Durham can ill afford to waste.

In 2008, MDC explored this issue in a report for GlaxoSmithKline entitled *Disconnected Youth in the Research Triangle: An Ominous Problem Hidden in Plain Sight*. While some significant steps occurred following the release of that report, after almost five years we are still without a coherent education-to-career system that gives all youth and young adults the skills and credentials they need to succeed in the 21st century economy. In August 2011, following MDC’s move to Durham, our board of directors challenged us to examine what such a system should look like: its goals, programs, structures, and priorities. This report, *Made in Durham*, is about the action that Durham’s leaders— across all sectors—must take to achieve the vision that every young person in Durham has the opportunity to achieve a postsecondary credential and begin a rewarding career by the age of 25.

The central premise of our report is that all Durham’s youth and young adults are entitled to a first-rate education and training system that prepares them for successful adulthood and the good jobs in our labor market. Equally, we believe that *the measure of this system’s value must be that it works as well for the most disconnected young person as it does for the most privileged.*

A Dual Customer System

There are two complementary goals of an education-to-career system: to prepare youth and young adults for rewarding careers, and to meet employer demand for a skilled, productive workforce. A high-performance system must be equally good at achieving both objectives and meeting the needs of both customers.

YOUTH AND YOUNG ADULTS

Durham's young people are a widely diverse group. They vary in age, ethnicity, culture, and family status; in aptitude, aspiration, and motivation; in academic and vocational proficiency. Many face barriers of language, poor housing, a criminal record, abusive relationships, or adolescent parenthood. Too many face hardships related to poverty, race, and class. Some are emotionally vulnerable, but most are surprisingly resilient with optimism about the future. To better understand who should be served through an education-to-career strategy, we have used rough estimates to segment young people into three broad, overlapping groups:

- *The On-track (60%)*: High school students and those enrolled in postsecondary education or training who are close to their age group.
- *The Behind (25%)*: Youth and young adults who are behind their age group in high school and/or postsecondary education.
- *The Disconnected (15%)*: Youth and young adults who are far from achieving a high school diploma or work readiness and face serious barriers to further education and employment.

Put another way, 40 percent of Durham's youth and young adults are off track. The long term cost to these young people is significant: high school dropouts make \$14,000 less annually than those who attended even one or two years of college and they experience nearly three times the poverty rate. The cost to taxpayers is equally severe. According to one study, each disconnected youth costs taxpayers \$14,000 per year, or \$250,000 over a lifetime. Much of that cost, including policing and loss of property taxes, occurs at the local level. In other words, the disconnected youth in Durham cost local, state, and federal taxpayers between \$63 million and \$84 million per year. For every 500 youth that Durham reconnects, taxpayers will save \$7 million annually.

EMPLOYERS AND THE DURHAM LABOR MARKET

Durham employers are as diverse as our young people. They include major corporate headquarters and small neighborhood businesses, large public and educational institutions, and cultural and nonprofit organizations. They cover roughly 180,000 jobs—including over 50,000 middle-skill/middle-pay positions—in science and technology, entertainment and the media, management, manufacturing, and services. However, few young Durham residents are securing these jobs because they don't have the applicable credentials or work-readiness skills; because they don't have access to the necessary transportation, career knowledge, or social networks.

Findings and Recommendations

The findings outlined in our report are based on research and interviews with more than 90 leading experts and staff working on the frontlines of youth development. In essence, we found that there is no education-to-career *system* for Durham's youth and young adults—that the odds of low-income youth, particularly young men and women of color, moving smoothly through the existing institutional infrastructure to productive adulthood are slim. Certainly, there is no robust system of support to keep them on-track and recover them when they fall. More fundamentally, there is no sense of community-wide commitment—backed by leadership, focus, and resources—to guarantee that every Durham young person has a fair shot at making it out of poverty and into the civic and economic mainstream of North Carolina.

Our recommendations are based on six assumptions, drawn from national research and what we learned about Durham:

- The prospect of a good job and a meaningful career is a powerful motivator for young people to stay in school and complete postsecondary education and training.
- Most employers will only engage at scale if the system meets their business objectives and candidates meet their standards for job readiness.
- With limited financial resources, reform of Durham’s system must use existing funds better and leverage them to attract additional private and public investment.
- It is better to build on Durham programs with demonstrated good performance than to start from scratch.
- An education-to-career system is not the responsibility of any one organization; rather, it is the shared responsibility of all community partners.
- A clear definition of the system’s purpose, goals, scope, and measures should be the first step in reform.

We recommend that the principal system and governance changes include:

- In the next year, Durham should establish a goal for increased postsecondary attainment and full-time employment for young adults, along with annual public measures to track progress toward this goal.
- The systemic and programmatic reforms proposed require leadership with the authority, credibility, and commitment to effect institutional and cultural change in both the public and private sectors. To achieve this, the Durham Education and Employment Alliance (the Alliance) should be established to oversee the design and implementation of an education-to-career system for the city and county.
- Young people should be engaged directly in the design, monitoring, and evaluation of programs and services within the education-to-career system. A Youth Consumers Council should be established, reporting to the mayor and the Alliance.
- Data are pivotal to the planning, management, performance, and evaluation of an education-to-career system. Durham should invest in two data systems: (1) a cross-sector data sharing system that tracks individual and organizational progress and (2) a modern labor market information system.
- With declining budgets for education, job training, and social services, Durham will need to do more with less. To increase efficiency savings and attract new funds, Durham should undertake a project to track all existing funds (“follow the money”); increase program alignment through cross-sector planning and contracting; and create a Performance and Innovation Fund supported by local foundations and employers.

PROGRAM DESIGN RECOMMENDATIONS

Key measures of success for Durham’s education-to-career system will include both how many young people gain a postsecondary credential with economic value and work that pays living wages, and how efficiently they progress through the system. Because youth and young adults start in different places and move at different rates, the system must be accessible, flexible, well-coordinated, and cost effective. It also must draw on employer resources and expertise as strategic leaders, as co-creators and technical advisors of programs, and as consumers providing work experience, mentors, and employment.

To achieve its objectives for both customers, we recommend that the design of Durham’s education-to-career system be based on five program features:

Multiple pathways: The diverse needs of at risk young people require a flexible system of multiple pathways that allow them to enter or re-enter at different points on the education continuum and progress in different settings, at their own pace, to a diploma or GED, a postsecondary credential, and employment.

Blended learning and work: Integrated education and work (summer jobs, internships, work-based learning) from middle school through postsecondary education and training provides relevance and rewards for young people, and the prospect of a good job is a powerful motivator to finish or return to high school and college.

Demand-led training: The interests of an education-to-career system's two customers, youth and employers, are the same: the better the system meets the needs of Triangle employers and the economy, the better prepared Durham's young people will be to compete for good jobs in the labor market. The most successful career and sector-based programs are designed from the "outside in" to meet employer standards for work readiness in academic, occupational, and soft skills.

Adult guidance and advocacy: It is easy for Durham's youth and young adults to get lost in the complex maze of more than 100 programs and services. Skilled case managers and coaches are important in helping them to navigate and in providing personal support to keep them on track. The more vulnerable the young person, the more important it is to have this support in place.

Cross-sector collaboration: Few of the federal and state regulatory frameworks that drive the behavior of Durham's large public institutions provide tangible incentives for cross-agency coordination and collaboration. Without common goals, funding, data, and performance incentives it is difficult for even the most willing institutions to align their curricula, expand their eligibility criteria, pool services, share information, and streamline administration.

Priorities for Implementation

Full implementation of an education-to-career system will require a concerted effort in the coming years. At the same time, it is important that Durham's leadership signal its commitment to invest time and resources in this issue now. We recommend that Durham adopt a two-pronged approach that combines several important first steps of system-building with strategic investments in programs to produce early and visible wins.

- Establish the Durham Alliance for Education and Employment as a business-led public/private partnership immediately and charge the Alliance with the development of an operational blueprint for systems change over the next five years.
- Complete an analysis of current federal, state, county, city, and private funds that Durham receives for all youth-related services.
- Design client-tracking and labor market information systems, considering relevance to policy and operational needs, user-friendliness, and costs.
- Work with national experts and local partners to develop a transitional employment program for older disconnected youth that will immerse them in full-time education and paid employment.

- Develop a 2013 youth summer jobs program, in the context of a broader employer engagement strategy, to at least double the existing opportunities and provide the basis for expanded high school CTE and work experience.
- Expand and enrich Durham Public Schools career academies that blend learning and work in high-growth sectors of the Triangle economy.
- Work with Durham Technical Community College to develop demand-led, sector-based programs for students' entry to middle- and higher-skilled jobs in the Triangle.
- Analyze the accessibility and adequacy of services for Latino young people and set priorities for measurable improvements.

Conclusion

Today, we are at risk of writing off a good share of our youth and future workforce on the premise that we simply can recruit from other counties and states. This strategy is unjust, socially divisive, and economically unsound. As our report documents, the costs and consequences of inaction are high. Durham must act now if we are to fulfill our most fundamental responsibilities to our young people and preserve our reputation as a healthy, forward-looking community. We must assure that every youth and young adult who grows up in Durham is as educated and skilled as those who move here. We must assure that being "Made in Durham" also means prospering in Durham.

Introduction

Durham is thriving. We have a strong employer base, we are not short of good jobs, and our employment growth rate is projected to outstrip the state and the U.S. by 2021.¹ Yet too few of our young people are getting these good jobs, and too few have the academic and workplace skills to compete with more qualified candidates from other cities and states. We may not be able to change the market, but we can build a system that equips our youth and young adults with the skills necessary for rewarding careers in the Triangle. We can build a “Made in Durham” pipeline of education and training that assures that our young people are as qualified as any newcomer. This report is about the action that Durham’s leaders—across all sectors—must take to have “Made in Durham” become a badge of pride.

The “Made in Durham” vision: Every young person in Durham has the opportunity to achieve a postsecondary credential and begin a rewarding career by the age of 25.

We are very far from that position today. There are 44,000 14-to-24-year-old youths and young adults in Durham today.² Their future as educated, contributing citizens is tied directly to our economic and civic well being. Our ambition to thrive as a vibrant center of higher education and the arts, as a medical and technology hub of the South, as an appealing place to live and work, depends on an engaged, responsible citizenry. It depends on giving all young people the opportunity to flourish as members of a skilled workforce and strong community.

Roughly 40 percent of Durham’s youth and young adults are not on track to complete high school, achieve a postsecondary credential of some kind, and gain employment by the time they are 25. A substantial number will struggle in the process, and some will not make it at all. There are now between 4,500 and 6,000 disconnected youth—enough to fill four Durham high schools—who are either at significant risk of dropping out of high school, or who are not pursuing any education, training, or employment.³ All of them have talent and the aspiration for a better life. Together, they represent a source of workforce skills, civic participation, and taxpayer revenue that Durham can ill afford to waste.

The external environment that shapes the life course of low-income young people is harsh—particularly for young women and men of color. The recession of the past four years has fundamentally changed our economy, accelerating the shift to a labor market where the educated can compete for rewarding careers while the less skilled are relegated to low-pay, high-turnover jobs. The part-time work that has traditionally provided teenagers with their first summer and after-school jobs is no longer plentiful. Education is under unprecedented financial pressure and funding for job training and social services is in sharp decline at the very time when demand is most intense.

During the past decade, Durham has invested heavily in economic development, with impressive results. We must now make the same investment in human capital: we must assure that Durham’s youth and young adults have the skills to compete for the region’s good jobs. This is not the responsibility of any one organization; it is the shared responsibility of all community partners. It will require a transformational strategy, significant institutional change, and a shift in cultural

expectations. We must build an education-to-career system that engages young people at every stage of their education and training, that supports those in danger of disengaging and recovers those who have dropped out, that maximizes career potential and creates reliable routes into meaningful employment. Our recommendations will benefit *all* Durham youth and young adults because *all* are entitled to the best education, training, and personal support that we can provide. But note: while we suggest an education-to-career system that benefits all, the fundamental measure of its success must be that it is as effective for the most vulnerable young person as it is for the most privileged.

For nearly fifty years, MDC has helped communities throughout the South and across the country develop strategies that will improve the education, employment, and economic security of low-income people. In 2008, we explored this issue in a report for the N.C. GlaxoSmithKline Foundation, entitled *Disconnected Youth in the Research Triangle Region: An Ominous Problem Hidden in Plain Sight*⁴. While some significant steps occurred following the release of that report, after almost five years, we are still without a coherent education-to-career system that gives all youth and young adults the skills and credentials they need to succeed in the 21st century economy. In August 2011, following MDC's move to Durham, our board of directors challenged us to examine what such a system should look like: its goals, programs, structures, and priorities. This report, *Made in Durham*, is our contribution.

We began our work in November 2011 and have interviewed over ninety leading experts, policy makers, employers, community leaders, and staff working on the frontlines of youth development. We have researched the field, drawing on more than one hundred reports and the experience of communities throughout the country, including visits to three cities recognized for excellence in education-to-career systems. We have roughly mapped the organizations in Durham that provide education, training and supportive services for youth and young adults. Where we have had access to reliable data, we have attempted to assess their capacity, scale, and results in comparison with best practices in other communities, as these organizations should provide the foundation on which to build a better system.

Our work has been overseen by a panel of distinguished citizens who have met regularly to guide our research, challenge our assumptions, and shape our recommendations. The panel members are:

- Elaine Bushfan, Judge, North Carolina Superior Court, District 14B, Durham County
- Arnold Dennis, Executive Director, Juvenile Justice Institute of North Carolina Central University
- Martin Eakes, CEO, Center for Community Self-Help
- Michael Goodman, Vice President for Real Estate, Capitol Broadcasting Company
- Ivan Parra, Lead Organizer, Durham CAN (Congregations, Associations, Neighborhoods)

Our report is divided into five sections:

- Section One provides an overview of the two “customers” of an education-to-career system—youth and young adults, and employers—within the Triangle labor market.
- Section Two describes our findings related to Durham’s existing system.
- Section Three contains our recommendations for goals, systems and structures, and program design features.
- Section Four suggests priorities for implementation.
- Section Five identifies several policy issues that are beyond the scope of this report but are critical to improving long-term outcomes.

Section One:

A Dual Customer System

There are two complementary goals of an education-to-career system: to prepare youth and young adults for rewarding careers and to meet employer demand for a skilled, productive workforce. A high-performance system must be equally good at achieving both objectives and meeting the needs of both customers.

Youth and Young Adults

Durham's young people are a widely diverse group. They vary in age, ethnicity, culture, and family status; in aptitude, aspiration, and motivation; in academic and vocational proficiency. Many face barriers of language, poor housing, a criminal record, abusive relationships, or adolescent parenthood. Too many face hardships related to poverty, race, and class. Some are emotionally vulnerable, but most are surprisingly resilient with optimism about the future.

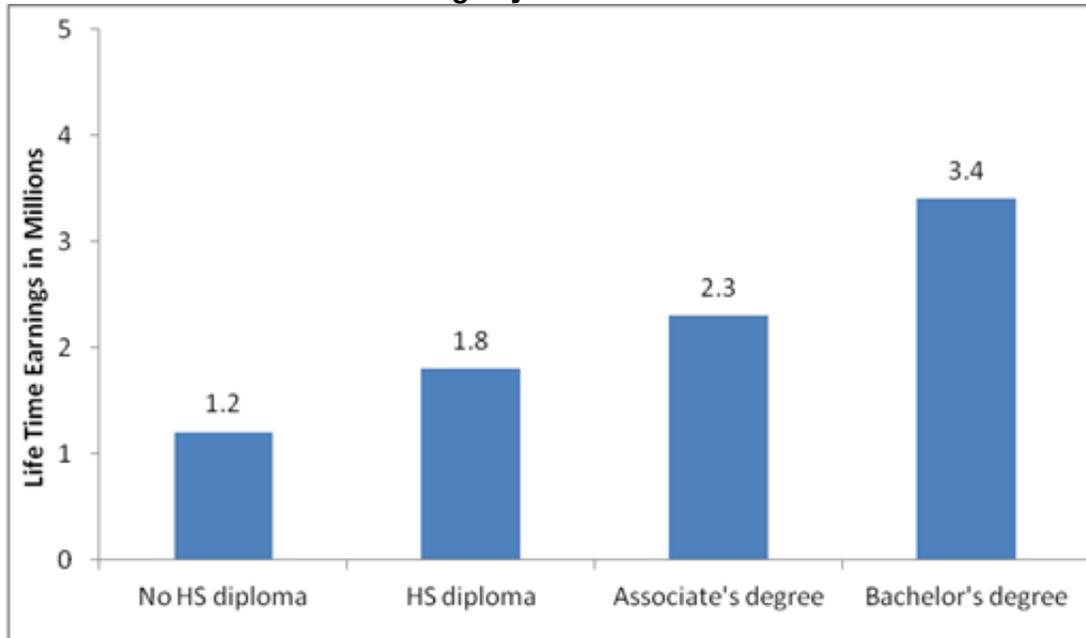
A few statistics give more definition to Durham's 44,000 youth between the ages of 14 and 24 years and underscore the link between race, poverty, and education:

- The majority of youth and young adults are poor or near poor: 30 percent live in poverty (\$18,000 per year for a family of three), 52 percent live under 200 percent of the federal poverty level, and about 15 percent receive SNAP benefits (formerly known as the food stamps program).⁵
- African Americans and Latinos comprise an increasing majority of the youth and young adults in Durham, and especially in our focus age group: 44 percent are African American, 32 percent are white, 15 percent are Latino, and 7 percent are Asian.⁶ At the same time, in Durham and in the country, African-American and Latino families are suffering the most in the current economy. About one in four African Americans and one in four Latinos in Durham are in poverty.⁷
- 20 percent are working and not in school, and 10 percent are neither in school nor working.⁸
- Of the more than 1,250 youth and young adults who are involved in the criminal justice system, 80 percent are African American and 75 percent are high school dropouts.⁹
- The unemployment rate for youth 16-to-19 years old is 37 percent; the unemployment rate for young adults 20-to-24 years old is 15 percent.¹⁰
- The disparities by race in unemployment are bad for all ages but even worse for younger adults. In the last three years, 78 percent of young adults receiving unemployment insurance were African American, while 64 percent of all recipients were African American.¹¹
- In Durham, people of color are more likely to hold jobs as laborers and service workers, and less likely to hold executive positions. Approximately 88 percent of executives in Durham's private sector are white, 5 percent are African American, and 2 percent are Latino.¹²

As measured by income and social mobility, the cost of poor education for our young people is high. In Durham, those who attain a bachelor's degree earn 68 percent more than those with only

a high school diploma.¹³ According to national data,¹⁴ the average lifetime earnings of those with postsecondary education are also significantly higher, as illustrated in the figure below.

**Figure 1:
Lifetime Earnings by Educational Attainment**



Source: Georgetown University Center on Education and the Workforce

For high school dropouts, the cost is particularly severe. In Durham, high school dropouts make \$14,000 less annually than those who attended even one or two years of college, and they experience nearly three times the poverty rate, 31 percent, of those who attended some college and six times the poverty rate of those with a bachelor's degree.¹⁵ They also are significantly more likely to be single parents, in poor health, homeless or living in unstable housing, or involved with the criminal justice system.

The long-term costs to local and state governments are significant: reconnecting youth stimulates the economy and creates jobs, while disconnection costs taxpayers more and damages the business climate. According to a study from City University of New York, each disconnected youth costs taxpayers \$14,000 per year, or \$250,000 over a lifetime, reflecting government benefits, prison, and the reduced revenue from loss of property or income taxes.¹⁶ Much of that cost, including policing and loss of property taxes, occurs at the local level. In other words, the disconnected youth in Durham cost local, state, and federal taxpayers between \$63 million and \$84 million per year. For every 500 youth that Durham reconnects, taxpayers will save \$7 million annually. When taking into account wider societal costs, such as lost wages, income loss caused by a less productive economy, health burdens on private industries, and crimes committed by disconnected youth, the burden of each youth grows to \$37,450 per disconnected youth per year and \$755,900 over a lifetime.

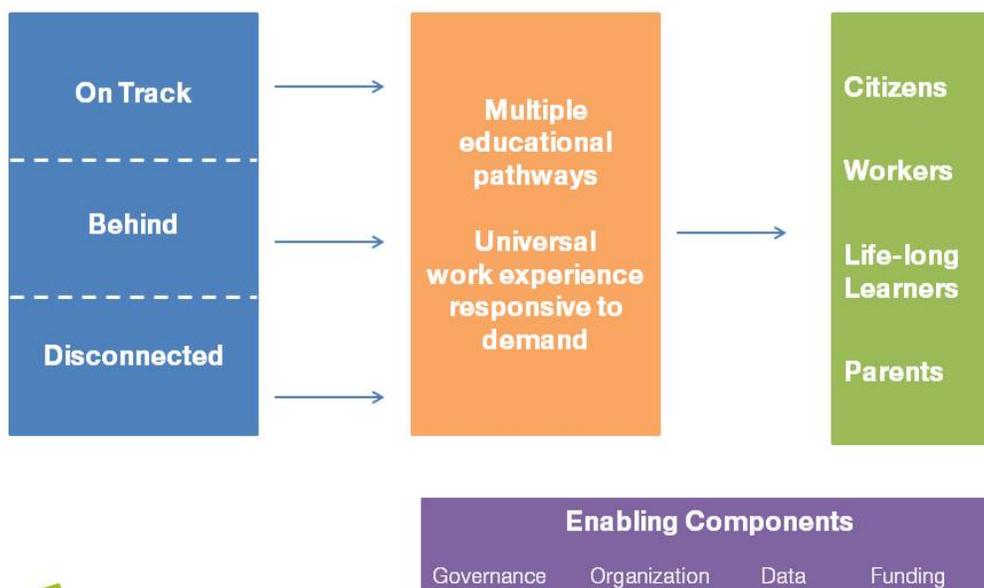
These numbers help to provide context and scope to the issue, but to better understand who should be served through an education-to-career strategy, we have used rough estimates to segment young people into three broad, overlapping groups¹⁷:

- *The On-track (60%)*: High school students and those enrolled in postsecondary education or training who are close to their age group. With moderate support, they are likely to attain a credential and continue to further education or employment.¹⁸
- *The Behind (25%)*: Youth and young adults who are behind their age group in high school and/or postsecondary education. Some are close to a credential and work readiness, some are far from there or already have dropped out, and most will experience one or more barriers to staying in or returning to education and training. They will need considerable personal and professional support to get back on track.¹⁹
- *The Disconnected (15%)*: Youth and young adults who are far from achieving a high school diploma or work readiness. They face serious barriers to employment, including substance abuse, mental health issues, prison records, homelessness, or chaotic lifestyles. They will need intensive support over a sustained period.²⁰

Put another way, 40 percent of Durham’s youth and young adults are off track.

There is growing evidence in education and training research that multiple pathways are needed to support the transition from education to meaningful employment, as illustrated in the graphic below. Programs and services within these pathways will differ, but they share a common core of integrated work and learning. We describe this approach in more detail in Section Three.

Supporting Multiple Pathways



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Employers and the Durham Labor Market

Durham employers are as diverse as our young people. They include major corporate headquarters and small neighborhood businesses, large public and educational institutions, and cultural and nonprofit organizations. They cover roughly 180,000 jobs in science and technology, entertainment and the media, management, manufacturing, and services.²¹ Despite the recession, they are operating within a robust, knowledge-based regional economy in which employment growth rate is projected to outpace the state and the U.S. by 2021. Raleigh and Durham metropolitan areas are among the top 35 in the United States for job growth, particularly in the middle- and high-skill sectors²². Between 2002 and 2010, the Triangle created more than 135,000 jobs, with 22,023 of those in Durham.²³

Importantly, about 30 percent—almost 53,000—of Durham’s total jobs meet the *middle-skill* criteria: jobs that pay \$25,000 to \$60,000 and require an associate’s degree, vocational credential, and/or structured on-the-job training. By 2021, this number is expected to grow to at least 65,000. Durham is projected to have at least 2,300 new or replacement jobs in this category annually.²⁴ Appendix A shows projected growth and educational qualifications of jobs in Durham County.

But the striking fact is that job growth has not meant more jobs for young adults in Durham. While the working age population grew by almost 25,000 from 2002 to 2010, and the population of residents between the ages of 16 and 29 increased by about 6,300, the number of employed Durham residents under the age of 29 *decreased*.²⁵ So, while Triangle employers are attracting skilled employees, most are from Wake and Orange counties or from other states and countries.

The central issue, then, is not that we lack good jobs, but that too few young Durham residents are securing these jobs because they don’t have the applicable credentials or work-readiness skills; don’t have access to the necessary transportation, career knowledge, or social networks.

Steering Durham’s youth to sectors where there are good jobs *and* demand is one of the essential functions of an education-to-career system. To do that well, the data about those jobs must be based on up-to-date labor market information with a particular focus on the sectors and occupational clusters that meet these criteria:

- Evidence of current and projected growth
- Durham living wage
- Opportunity for career progression
- Academic and vocational credentials that have economic value and are within reasonable reach of participants

MDC’s initial research that points to the occupations and clusters meeting these criteria in Durham appears in Appendix B. Priority should be given to the following areas, because of the number of middle-skilled jobs and the projected openings for those jobs:

- Biomedical/biotechnology, including: registered nurses, clinical and pharmacy technicians, and medical assistants
- Advanced materials, including: product assemblers, electrical technicians, and purchasing agents
- Information technology and telecommunications, including: computer support specialists, product assemblers, and customer service representatives
- Business and financial, including: insurance sales agents, policy processing clerks, and claims adjusters

- Computer and electronic product manufacturing, including: engineering technicians, product assemblers, and bookkeepers
- Defense and security, including: computer support specialists, electronic engineering technicians, and customer service representatives

In addition, self-employment and enterprise development, along with emerging occupations in such fields as environment, health, advanced manufacturing, and creative industries will offer niche opportunities for some youth and young adults.

Section Two: Findings

Durham has an exceptional number of people who contribute their skills and resources to youth development. In the past several years, their work has produced significant initiatives and an increasing awareness of the importance of young people to the city's future well-being. A few examples of these include:

- Durham city²⁶ and county²⁷ governments and the public school²⁸ system have placed youth disconnection and dropouts front and center on the public agenda.
- A small number of themed high schools, combining rigorous academic preparation with career development, have been established in such high-growth fields as technology and medicine.
- A variety of small, second-chance initiatives have been developed for school dropouts to obtain a high school diploma while simultaneously earning college credits; to accelerate learning and preparation for earning a GED; and to provide intensive support, individual tutoring, and small classes as a step toward further education and workforce development.
- Important cross-sector collaboratives have been started to improve early childhood education and adolescent mental health.

Most recently, IBM's Smarter Cities initiative contributed a detailed analysis and important recommendations for improving services for disconnected youth and young adults²⁹. Its findings coincide closely with the ten major themes that emerged consistently throughout our discussions with educators, program managers, frontline staff, and MDC panel members.

Our major findings are:

1. *There are no shared goals, common vision, and common measures* that provide a strategic framework and clear incentives for institutional collaboration on an education-to-career system that meets the needs of young people.
2. *No leadership group exists that has the power to shape such a vision, accelerate institutional change, and coordinate the resources* necessary to ensure that 14-to-24-year-old low-income youth gain postsecondary credentials and a meaningful career.
3. *There is no evidence that employers or youth are engaged* strategically and systematically in the leadership, design, and performance feedback of education and employment programs.
4. *There are significant barriers to accessing current and reliable data* to inform decisions about youth programming. There are many data systems at the federal, state, local, and agency levels. None provide a full, accurate picture of the numbers, characteristics, or needs of youth and young adults in Durham. None are connected in a way that allows tracking of individuals across institutional boundaries. Few are used to drive program design, build knowledge, or strengthen education and employment outcomes. There is little performance data that is transparent to the public.

5. *There are few opportunities of scale and continuity for youth and young adults to experience the world of work through summer jobs, organized work/study programs, year-round work experience, paid internships, transitional employment, or volunteering and civic engagement.*
6. *Once they're off track, behind and disconnected, youth are easily lost.* There is no ready access to information on where to go or how to navigate the complex system, and no guidance on how to take the first step from where they are now to a better place. For those over 18, there is no single agency with responsibility (and, therefore, none with accountability) for ensuring the support systems are in place (housing, health, transportation, child care) to achieve a credential and work.
7. *Durham has a well-established record of investment, innovation, and excellence in programs for the most gifted students. There is no equivalent investment and cutting-edge creativity in programs for young people facing the most serious barriers to academic and workforce achievement.*
8. *There is no effective mechanism to promote cross-agency collaboration, program re-alignment and accountability, knowledge management, or professional staff development.* The nonprofit sector is fragile, fragmented, and, for the most part, only marginally connected to the big public agencies (Durham Public Schools, Durham Technical Community College, health agencies, social services, and the juvenile justice system).
9. *The public funding systems and private foundations do not work together to improve performance, impact, organizational stability, or collaboration among grantees.* Program operators are subject to short-term funding and extensive compliance, with little alignment of goals or reporting requirements.

In essence, *there is no education-to-career **system** for Durham's youth and young adults.* Taken together, our findings suggest that the odds of low-income youth, particularly young men and women of color, moving smoothly through the existing institutional infrastructure to productive adulthood are slim. Certainly, there is no robust system of support to keep them on-track and recover them when they fall. More fundamentally, there is no sense of community-wide commitment—backed by leadership, focus, and resources—to guarantee that every Durham young person has a fair shot at making it out of poverty and into the civic and economic mainstream of North Carolina.

Section 3:

Recommendations for an Education-to-Career System

Our recommendations for what's needed in Durham are based on six assumptions drawn directly from our national research and what we have learned about Durham:

- The prospect of a good job and a meaningful career is a powerful motivator for young people to stay in school and complete postsecondary education and training.
- Most employers will only engage at scale if the system meets their business objectives and candidates meet their standards for job readiness.
- With limited financial resources, reform of Durham's system must use existing funds better and leverage them to attract additional private and public investment and influence.
- It is better to build on Durham programs with demonstrated good performance than to start from scratch.
- An education-to-career *system* is not the responsibility of any one organization; rather, it is the shared responsibility of all community partners.
- A clear definition of the system's purpose, goals, scope, and measures should be the first step in reform.

The recommendations in this section are organized under two headings: systems and structural changes, and program design features of effective delivery.

Systems and Structural Changes

While Durham has a patchwork of programs to serve low-income youth, the city lacks an education-to-career *system*, with a clear vision, strategic framework, common measures, good data, and funding to encourage institutional collaboration. It is also missing the strong leadership that is a critical determinant of successful reform.

In MDC's extensive research on the best practices across the country, five elements related to systems change emerge consistently as the essential building blocks and are relevant to Durham:

1. Vision, goals, and measures
2. Leadership and governance
3. Youth engagement
4. Data collection and information
5. Funding

VISION, GOALS, AND MEASURES

Our vision for Durham is simple. It is that every young person has the opportunity to earn a postsecondary credential and begin a rewarding career by the age of 25. Specifically, we would like to see Durham set a compelling goal: By 2022, 90 percent of Durham young people will earn a postsecondary credential and obtain full-time employment by the age of 25.³⁰ However, until there is sufficiently robust data to set baselines for both targets and measures, this can remain only a

conceptual goal. **We recommend that in the next year Durham establish a goal for increased postsecondary attainment and full-time employment for young adults, along with the annual public measures to track progress toward this goal.** These measures should include:

- Increase in high school graduation rates
- Decrease in high school dropout numbers
- Percent of 25-year-olds who hold a postsecondary degree or credential
- One-year retention rate in training-related jobs for Workforce Investment Act program participants
- Decrease in number of 14-to-24 year olds who enter the criminal justice system
- Increase in the number of adjudicated young adults who attain a credential and employment
- Increase in number of employers and employees engaged actively in the education-to-career strategy
- Increase in number of summer jobs for high school students with good attendance and improved school performance
- Increase in number of work experience opportunities for Durham youth and young adults

LEADERSHIP AND GOVERNANCE

The systemic and programmatic reforms that we propose require leadership with the authority, credibility, and commitment to effect institutional and cultural change in both the public and private sectors. To achieve this, **we recommend the formation of the Durham Education and Employment Alliance (the Alliance) to oversee the design and implementation of an education-to-career system for the city and county.** To give the Alliance clout and independence, we recommend that it be established as a private non-profit 501(c)3 organization with a powerful, business-led board of directors drawn from the private, public, education, and nonprofit sectors. To succeed, it should be publicly accountable, have adequate financial resources, and a small, high-level staff. The principal responsibilities of the Alliance should be to:

- Establish measurable goals toward achieving education, training, employment, and equity outcomes for youth and young adults
- Approve a strategic plan that sets priorities for systems change, funding, and program development
- Develop mechanisms to ensure collective accountability for system outcomes and report annually to the public
- Maximize public and private resources
- Sustain momentum and promote participation of business and the community in the education-to-career system

The Alliance's staff would act as a neutral, independent convener, working with partners to achieve three key roles:

- Implement and oversee the strategic plan established by the Alliance
- Act as an intermediary between employers and the education and training providers
- Serve as a catalyst for systems change and program development

YOUTH ENGAGEMENT

The voice of young people is crucial to the design and operation of an education-to-career system. Essentially, this is a market-driven system; if youth (as with employers) do not like what is offered and if they have used the product or service and it has failed them in the past, it is unlikely that they will “buy” it again. Young people should be engaged directly in the design, monitoring, and evaluation of programs and services within the education-to-career system. **We recommend that a Youth Consumers Council be established, reporting to the mayor and with voting representation on the Alliance.** Its primary responsibilities should be to:

- Help assess the performance of the systems, programs, and support services whose objective is to ensure disadvantaged youth achieve a high school degree, postsecondary credential, and a job with career potential
- Contribute to the planning, redesign, or recognition of these systems and services
- Improve communication between Durham’s young people—particularly those facing barriers to education and employment—and established institutions
- Select co-chairs, who would be full voting members of the Alliance Board
- Celebrate individual and organizational achievements within the education-to-career system

DATA COLLECTION AND INFORMATION

There are many data systems in Durham. Few connect with each other and none provides an overall picture of the number, demographic characteristics, progress, and outcomes of youth and young adults as they move through education and training to employment. Data are pivotal to the planning, performance, and evaluation of an education-to-career system. Without good information, youth and young adults are poorly served or lost completely; practitioners have no basis by which to learn what works and improve delivery; policy makers and funders have no means by which to set baselines, align services, and encourage cross-sector collaboration. More fundamentally, the current lack of transparency means it is impossible to hold public institutions and program operators accountable for their results and return on investment.

Improving transparency in an education-to-career system requires shared data, definitions and terminology, common metrics, and resources to maintain the system. Organizationally and technically, it is a difficult undertaking that is further complicated by issues of user-friendliness, data confidentiality and security. However, the value of an accessible and relevant information system is now seen as crucial to statewide collaborations and effective program management. Increasingly, such systems are being linked to public funding, memoranda of agreement, and executive orders.

We recommend that Durham invest in two data systems: (1) a cross-sector data sharing system that tracks individual and organizational progress and (2) a modern labor market information system. Appendix C suggests some of the data elements and applications of both these information systems.

FUNDING

Declining budgets, combined with the deep economic recession, have severely eroded education, job training, and social services funding, and that will not change soon. This means that to improve performance, the system must do more with less. It means that, wherever possible, our proposals must be cost-neutral or add only marginal costs to existing budgets, either through increased efficiency savings within the system or by attracting new funds. At the same time, we recognize

that programs for the most disadvantaged youth and young adults are longer and more expensive. We have three funding-related recommendations:

- First, **we recommend that Durham undertake a project to “follow the money”—to track all federal, state, county, and city funds that currently support organizations, programs, and services for youth development.** The objective of this exercise is to identify all available resources, particularly discretionary funds that can be deployed or re-deployed more efficiently to build an education-to-career system. Other cities have conducted similar exercises with productive results³¹.
- Second, **we recommend that the Alliance work with the major public and education funders, experienced program managers, and community-based organizations to ensure their strategic planning, funding, and contracting systems are used to accelerate the transition to an aligned, collaborative education-to-career system.** There are well over 100 youth-serving organizations in Durham. Many of them provide similar services to similar types of youth and young adults. Many are small and lack the capacity to deliver services at scale; few are linked in any systematic way to the major public institutions, nor are they aligned in coherent pathways connecting schools, postsecondary education, or training with jobs. This fragmentation is unsustainable as resources continue to decline. With collectively agreed-upon investment priorities, partners would focus on building the set of multiple pathways towards jobs in demand needed to serve all of Durham’s youth.
- Third, **we recommend that the proposed Alliance work in collaboration with local foundations and employers to create a new Performance and Innovation Fund to support the goals established for the education-to-career system.** This would give the philanthropic community a direct stake in the design and evaluation of Durham’s investment in youth development and it would give the city discretionary funds needed to research promising practices, fill service gaps, and reward high performance and innovation.

Program Design Features

Key measures of success for Durham’s education-to-career system will be how many young people gain a postsecondary credential with economic value and work that pays living wages and how efficiently they progress through the system. Because youth and young adults start in different places and move at different rates, the system must be accessible, flexible, well-coordinated, and cost effective. It must also draw on employer resources and expertise as strategic leaders, as co-creators and technical advisors of programs, and as consumers providing work experience, mentors, and employment.

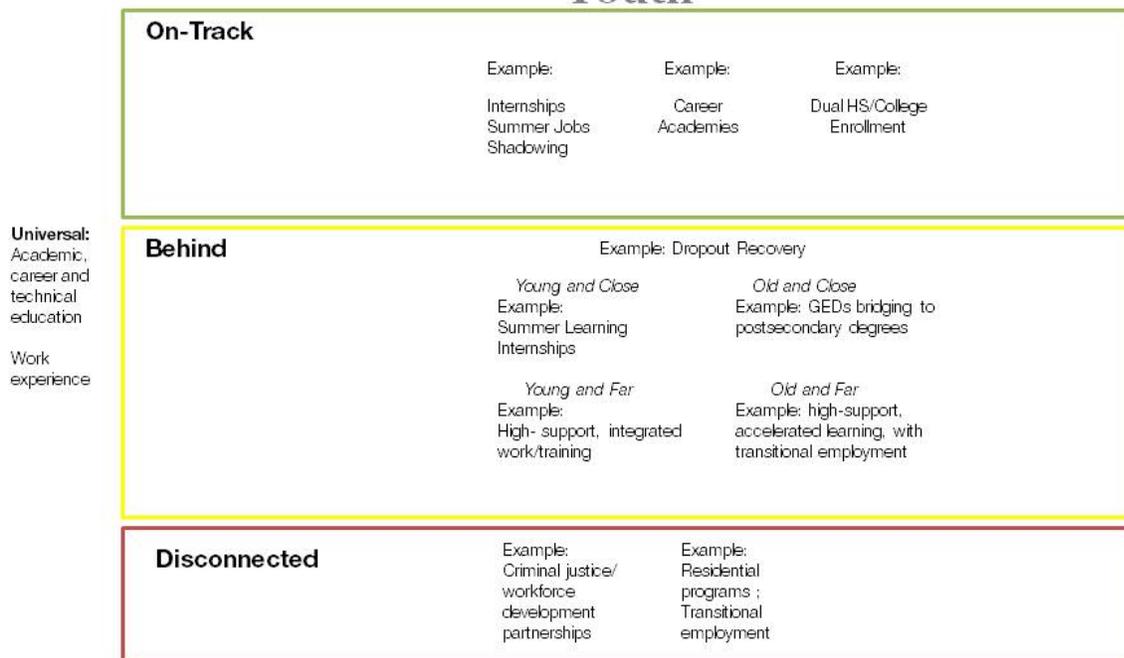
Our research indicates that five features characterize the most successful service delivery strategies. **We recommend that Durham’s education-to-career system include multiple pathways through education; blended learning and work; demand-led training; adult guidance and advocacy; and cross-sector collaboration.** A system designed with these features must encompass middle school through postsecondary education and training, and sustained employment. The following sections provide more detailed descriptions of the design features.

MULTIPLE PATHWAYS

Over 40 percent of Durham’s youth and young adults do not follow conventional or linear pathways through education to work. One analysis of state-wide data found that of every 100 students entering ninth grade in North Carolina, only 18 went on to complete a bachelor’s degree within six years or an associate’s degree within three years.³²

While Durham has a number of varied programs for these youth and young adults, they do not constitute a vigorous second-chance system. There is some support available for young people who are struggling in school but still, for the most part, on-track. There are fewer opportunities for those who are well behind their age group and lack work-readiness skills. There is a gaping hole for disconnected young adults who have dropped out, left foster care, been involved with gangs or the criminal justice system, and need intensive support over an extended period. The diverse needs of these young people require a flexible system of multiple pathways that allow them to enter or re-enter at different points on the education continuum and progress in different settings, at their own pace, to a diploma or GED and a postsecondary credential. See illustration below.

Providing Educational and Career Options for All Youth



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These pathways should fit within an education-to-career system whose purpose, boundaries, and measures have been clearly defined by the Alliance and its partners. To the extent practical, they should build on existing programs which have demonstrated their effectiveness, using discretionary or incentive funding to expand, enrich, and connect them into a coherent, cross-sector system.

BLENDING LEARNING AND WORK

Blending learning with work—and work with learning—from middle school through postsecondary education and training provides relevance and rewards for young people. We know that the prospect of a good job is a powerful motivator to finish or return to high school and college. In Durham, one indicator of this is the graduation rates of Durham Public School students who complete career and technical education (CTE) programs. At 82 percent, this is 8 percentage points higher than for those who are not enrolled in the program. The statewide figures are even higher at 90 percent for CTE completers, as compared to a 78 percent overall graduation rate.³³ Career academies, themed academic and technical curricula, and work-based learning, coupled with early and effective career guidance, are all proven strategies for engaging and re-engaging at-risk students. They are also a way of broadening horizons and raising aspirations for both youth and their parents.

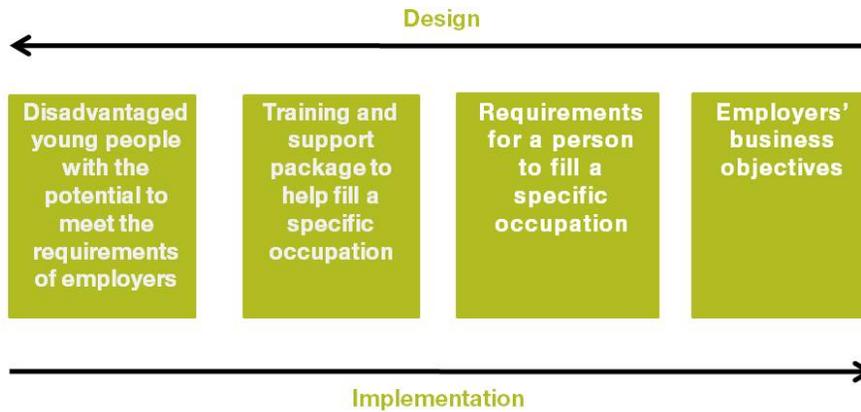
However, no matter how well Durham's schools and colleges educate and train young people, they will never be truly ready for the workforce without having experienced real work in some way. A priority for the Alliance and its partners should be to increase the number of paid work experience opportunities: summer jobs, internships, work/study courses, apprenticeships. For those who are on-track, or close to it, there should be work experience opportunities in the private sector. For those behind, the experience may begin in public sector, nonprofit, or social enterprise organizations to build employability skills. For disconnected youth, it may start with stipend-supported community service or subsidized employment situations.

DEMAND-LED TRAINING

The interests of an education-to-career system's two customers, youth and employers, are the same: the better the system meets the needs of Triangle employers and the economy, the better prepared Durham's young people will be to compete for good jobs in the labor market. While some companies may be motivated by a sense of corporate responsibility, a desire to enhance their public image, or an aim to ensure their staff profile reflects their customer base, most employers will only engage at scale if the system meets their business objectives.

The most successful career and sector-based programs are designed from the "outside in" to meet employer standards for work readiness in academic, occupational, and soft skills. The diagram on the next page illustrates this concept: program *design* starts with a detailed understanding of occupational requirements and business needs and works backward to specify the education and training requirements that a qualified candidate must meet; program *implementation* starts with an assessment of a young person's needs and works forward to ensure that a tailored package of training and support prepares the individual for the employer's specifications. The best yardstick for a demand-led system is when employers see it as their presumptive source of recruits.

Demand-Led Approach to Connecting Young People with Good Jobs



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ADULT GUIDANCE AND ADVOCACY

It is easy for Durham's youth and young adults to get lost in the complex maze of more than 100 programs and services. Skilled case managers and coaches are important in helping them to navigate and in providing personal support to keep them on track. The more vulnerable the young person, the more important it is to have this support in place. Whether case managers are based within the public school system, the higher education system, the workforce system, or nonprofit organizations, they can serve as the connecting tissue between agencies from initial assessment through attainment of educational credentials and employment. A number of cities have developed programs to help these young people through neighborhood outreach workers and re-engagement centers that include personal support and web-based guidance on education and training opportunities. Some of these programs are highly effective in recovering high school dropouts, and some pay for themselves since returning students increase state per pupil expenditure receipt.³⁴

Through the BECOMING Durham initiative, the county is developing a system of care to coordinate services among the government, nonprofit, and education sectors for the benefit of young people with a mental health or substance abuse challenge. Although still in its early stages, BECOMING, led by mental health agency Alliance Behavioral Healthcare, represents an unprecedented collaboration between youth-serving institutions, including the police, Durham Tech, the Workforce Development Board, and community correctional programs. However, our interviews with service providers revealed that there is still little support for youth and young adults who are not in school, or do not have previously diagnosed mental health or substance abuse problems and who want to connect with work or education.

CROSS-SECTOR COLLABORATION

Few of the federal and state regulatory frameworks that drive the behavior of Durham's large public institutions provide tangible incentives for cross-agency coordination and collaboration. Without common goals, funding, data, and performance incentives it is difficult for even the most willing institutions to align their curricula, expand their eligibility criteria, pool services, share information, and streamline administration. And yet, this is exactly what is required if youth and young adults are to receive the services they need, when they need them. Schools, colleges, and workforce development agencies, mental health, social services, juvenile and criminal justice systems—along with the smaller non-profit organizations—provide essential services for youth development and dropout recovery.

Institutional collaboration is hard. It is almost impossible to achieve, at any scale, without strong leadership and a strategic framework in which partners share the risks, rewards, and accountability for concerted action. For Durham, this underscores the importance of a countywide strategy, with common cross-agency measures and incentives for aligning programs and services that make it easy for young people to progress smoothly from school or GED to postsecondary education and workforce training to a job.

Section Four: Priorities for Implementation

We recognize that full implementation of an education-to-career system will require a concerted effort in the coming years. At the same time, it is important that Durham's leadership signal its commitment to invest time and resources in this issue now. This section outlines a two-pronged approach that combines several important first steps of system-building with strategic investments in programs that will produce early and visible wins. The recommendations below can all be achieved within one year.

Priorities for Implementation: Systems

1. There will be no action without leadership. The first priority should be to establish immediately the proposed Durham Alliance for Education and Employment as a business-led, public/private partnership and to charge the Alliance with the development of a blueprint for systems change over the next five years.
2. How money is used is as important as how much is available. The second priority should be to complete the aforementioned mapping and analysis of current federal, state, county, city, and private funds that Durham receives for all youth-related services. The objectives of the analysis should be to:
 - Identify existing patterns of investments and the degree to which they support the goals of an education-to-career system (identifying, for example, funds for prevention vs. treatment in education, criminal justice, mental health, etc.)
 - Improve alignment, coordination, and consolidation of services
 - Maximize public and private funding opportunities
 - Identify system and program gaps and advocate for additional investments
3. Without data, there is no way to plan the system, much less evaluate or improve it. The third priority should be for the Alliance and its partners to produce specifications for both client-tracking and labor market information systems—drawing on national best practice and, where possible, on the data systems in development by the BECOMING Durham project and East Durham Children's Initiative. In establishing the specifications for a cross-sector data sharing system, relevance to policy and operational needs, user-friendliness, and costs (start-up and maintenance) should be prime considerations.

Priorities for Implementation: Programs

Before decisions on program investments can be made, the proposed Alliance needs to consider three key questions:

- Where on the education and training continuum would two to three strategic investments generate the greatest improvement in overall services?
- What is the relative trade-off between spending less money but serving more youth (those on track and some of those behind) versus spending more money but serving fewer youth (the disconnected)? What is the trade-off between prevention vs. treatment?
- Which organizations within the system have the leadership, capacity, will, and readiness for advancing new ideas, expanding services, and being part of a new system?

In the longer term, decisions related to these questions should guide strategic funding priorities. However, in the short-term, given the lack of reliable and consistent performance data, our recommended investment priorities are based on those programs that provide a model for replication and expansion and/or that fill an important gap in service provision.

1. Currently there are extremely limited opportunities for older disconnected youth—particularly those leaving foster care, prison, or on probation—many of whom require intensive education, employment, and personal support for the one to two years after making this transition. Transitional employment programs that immerse young adults in full-time education and paid employment have been successful in other communities. We recommend that experts from these cities be invited to work with Durham partners in developing an operational plan and funding strategy for implementation of similar programs here.
2. Summer jobs are not only a source of income for young people. For many, they offer the first exposure to the workplace. Well-planned summer jobs programs can provide the basis for building year-round work experience opportunities for high school students. Used as a reward for school attendance and achievement, they can strengthen dropout prevention programs. Developed in the broader context of an employer-engagement strategy, they can be the starting point for business/education partnerships that offer employment opportunities across the education-to-career system. With approximately 300 slots for 14-21 year olds in 2011, Durham's existing summer program falls well short of its potential, given the number of employers in the Triangle. We recommend that the Alliance, city, and county develop and implement a 2013 summer jobs program that will at least double the existing opportunities and be used to reward attendance and achievement in academic and vocational education.
3. There are a number of Durham Public School career academies that exemplify the blending of learning and work, providing rigorous academic and occupational training for students in high-growth sectors of the economy. We recommend that the Alliance, career academy sponsors, and Durham Public Schools examine what future investments might be needed to expand and enrich these schools and report how the initiative might be replicated in themed academies throughout the school system.
4. Durham Tech is currently developing demand-led, sector-based programs to prepare students for middle- and higher-skilled jobs in the Triangle. Public and private funding should be invested to give this initiative the agility and flexibility needed to respond to student needs and dynamic business operations. The experience of what works and what

doesn't should be documented as part of an overall plan to create high quality occupational pipelines from high school to Durham Tech and four-year colleges, and into good jobs.

5. We have been unable to reliably determine whether the significant increase in 14-to-24-year-old Latino youth and young adults has been matched by an increase in accessible services within Durham's existing system. In our interviews with Durham service providers, we heard a number of concerns about limited support within the school system and about a lack of cultural competence and bilingual staff that impede access to education, training, and supportive services. Real and perceived barriers to public institutions and services create fear and distrust within the Latino community. We recommend the proposed Alliance analyze the accessibility and adequacy of services for Latino young people and set priorities for measurable improvements.

Section Five: Policy Reform Agenda

While federal and state policy issues are not directly within the scope of this report, five emerged consistently as significant barriers to improvement in North Carolina's education and employment outcomes for youth and young adults. These issues are not new. We recommend that they become part of the policy reform agenda for the proposed Alliance.

RAISE MANDATORY SCHOOL ATTENDANCE AGE

For much of its history, North Carolina has made investment in education a state priority. We lead the nation in a number of progressive policies and ground-breaking initiatives such as the New Schools project, the Early College High School initiative, and the overall drive to increase graduation rates. Paradoxically, North Carolina allows students to drop out of school when they are 16 years old, whether or not they have the basic academic or workplace skills to attain a postsecondary credential or rewarding employment. Thirty-two states require mandatory attendance until students are at least 17 or 18 years old. Raising North Carolina's compulsory school age to 18, coupled with flexible options and relevant curricula for students who are off-track has the potential to reduce Durham's dropout rate by 20 percent.³⁵

JUSTICE FOR JUVENILES

North Carolina is one of only two states in the nation in which all 16-year-olds charged with crimes are prosecuted in the adult justice system³⁶. The results: higher recidivism, lower lifetime earnings, and a lasting stigma. These make the chances of a good job slim. This is the "pipeline to nowhere" and it is mostly a pipeline for young men of color.

Action is needed on three fronts:

- Raise the age of North Carolina's juvenile justice system to 18.
- Make education and employment an outcome of that system.
- Identify and provide services to the most at-risk youth before they engage in criminal behavior.

INCREASE ACCESS TO EDUCATION FOR LATINO YOUTH

Undocumented immigrants are ineligible for Workforce Investment Act programs and may only attend North Carolina community colleges or four-year universities if they pay out-of-state tuition and do not supplant documented students. The 2011/2012 tuition for North Carolina's community colleges was at least \$3,132 per semester or more than \$6,200 annually for full-time students. This policy, approved in 2010 by the State Board of Community Colleges and an improvement over previous more-restrictive rules, still essentially bars all undocumented Latino young people from postsecondary education. Although it would likely take an act of the N.C. General Assembly, states as diverse as Texas and California have permitted access to college at a low cost for undocumented students.³⁷ In April, the Obama administration announced that 15 to 30 year olds who have lived in the country at least five years would be able to apply for a work permit. In North

Carolina, this could mean 50,000 more workers for business and industry, if they have access to training and credentials.³⁸

Latinos now make up 14 percent of Durham's population.³⁹ The number of Latino children who have enrolled in the public school system has quintupled in the past decade, and they now make up 23 percent of students in Durham Public Schools.⁴⁰ We heard frequently in our practitioner interviews that many of these youth and young adults are undocumented. Although we do not have precise data for Durham, the Pew Hispanic Center estimates that 325,000 undocumented immigrants live in North Carolina and the majority of those immigrants are Latino.⁴¹ Durham's long-term prosperity and our reputation as the nation's most tolerant city⁴² depends on affording economic and educational opportunity for *all* young people. Every student who graduates from a North Carolina high school should be able to enroll in our educational institutions at affordable prices.

PERFORMANCE INCENTIVES FOR COMMUNITY COLLEGES

In North Carolina, the state provides about 70 percent of local community college funding⁴³. That funding is based on the number of full-time equivalent (FTE) students enrolled rather than on outcomes such as educational attainment or employment.⁴⁴ Equally problematic, the current funding formula fails to provide incentives for serving disadvantaged and low-income students.⁴⁵ Until the goals, measures, and financial incentives of the education system are properly aligned, community colleges will be unable to serve as an effective bridge to further education and careers.

CROSS-SECTOR DATA SHARING

Throughout this report, we have underscored the critical importance of data to setting strategic objectives, tracking young people, assessing performance, and evaluating systems impact. Durham's youth agencies can—and should—improve the quality of their own data collection and analysis. However, without state support, they cannot achieve the data sharing necessary to track young people and services across education, workforce, justice, and human service agencies.

North Carolina has developed a Common Follow-up System that produces information on current and former participants of education and training programs. Housed at the North Carolina Employment Security Commission, the system has the capacity to share data between public schools, UNC, the community colleges, workforce development, and criminal justice systems.⁴⁶ However, its data is virtually impossible to access, even for participating organizations. State commitment to the Common Follow-up System, augmented with a Memorandum of Understanding for common data collection and sharing among relevant state agencies, is central to student success and public accountability.

Conclusion

Durham is thriving. It is a creative city. A tolerant city. A center of high skills and higher education, of advanced medicine, bioscience, and technology. It is an economic engine within the region and a special place to live and work. Unless, that is, you are young and poor, and especially if you are young, poor and a person of color. Less than 60 percent of our young people are on track to have the postsecondary credentials and workplace skills to compete successfully for good jobs in the Triangle by the time they are the age of 25. Too few will have a fair shot at making it out of poverty and into Durham's civic and economic mainstream. Too few will fulfill their aspirations for themselves and their families, or have the opportunity to contribute their rich talents to the community.

Today, we are at risk of writing off a good share of our youth and future workforce on the premise that we can simply recruit from other counties and states. This strategy is unjust, socially divisive, and economically unsound. As this report has documented, the costs and consequences of inaction are high.

Durham must act now if we are to fulfill our most fundamental responsibilities to our young people and preserve our reputation as a healthy, forward-looking community. We must assure that every youth and young adult who grows up in Durham is as educated and skilled as those who move here. We must assure that being "Made in Durham" means prospering in Durham.

This objective is well within our grasp. This report provides a broad, conceptual framework. But it is the beginning, not the end, of the process. Working together, Durham has the skills, resources, and much of the organizational capacity to translate this framework into detailed design ready for implementation. We now need the political will and public leadership to deliver the promise of equity and opportunity for all our young people.

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Appendix A

Triangle Job Growth and Qualifications

Projected Growth in Durham County Middle-Skill Jobs 2011-2021

Education Level	2011 Jobs	2021 Jobs	New Jobs	Annual Openings	% of Total Jobs, 2011	% of Total Jobs, 2012
Associate's degree	16,024	20,049	4,025	732	8.9%	9.2%
Postsecondary vocational award	7,708	9,112	1,390	294	4.3%	4.2%
Long-term on-the-job training	7,625	9,339	1,703	344	4.2%	4.3%
Moderate-term on-the-job training	22,121	27,027	4,863	938	12.3%	12.3%
Total jobs	53,478	65,527	11,981	2,308	29.7%	30%

Source: N.C. Department of Commerce and EMSI Covered Employment-2012.1.

Note: This includes "covered employment" only, so does not show growth in government or self-employed positions.

Triangle Job Growth 2002-2010

	Total Jobs Created	Jobs Created at \$1,250 per month or less	\$1251 to \$3,333 per month	More than \$3,333 per month	Total Additional Workers	Jobs at \$1,250 per month or less	Jobs at \$1251 to \$3,333 per month	Jobs at more than \$3,333 per month
Orange	7,589	556	1,318	9,463	5,827	-582	-2,055	8,464
Wake	106,058	3,206	24,049	78,803	57,112	2,095	-1,730	56,747
Durham	22,023	-3,918	-8,310	34,251	3,195	-2,820	-7,781	13,796
Total	135,670	-156	17,057	122,517	66,134	-1,307	-11,566	79,007

Source: Center for Economic Studies, U.S. Census Bureau

Appendix B

Growth Clusters with Middle-Skill Jobs within Durham County

Cluster of Occupations	2011 Middle-Skill Jobs	2021 Middle-Skill Jobs	% Change	Annual Openings
Biomedical and Biotechnology	13,824	17,763	28%	669
Advanced Materials	4,238	5,903	39%	260
Business and Finance	3,553	4,814	35%	202
Information Technology and Telecommunication	4,304	5,497	28%	218
Computer and Electronics	1,990	2,747	38%	119
Defense and Security	1,224	1,688	38%	76

Source: N.C. Department of Commerce and EMSI Covered Employment-2012.1.

Note: This includes "covered employment" only, so does not show growth in government or self-employed positions.

Appendix C

Suggested Information System Specifications

Cross-Sector Data System

In general terms, a cross-sector data system should provide the following real-time information for an education-to-career system:

- Numbers, demographic characteristics, and predictive risk indicators of individual youth and young adults
- Individuals' progress within and across institutional boundaries and where they are going off-track
- Quality and efficiency of organizational performance
- Collective system progress against goals and selected shared indicators
- Program alignment, service gaps, and multiple pathway development
- Qualitative and quantitative outcomes in relation to the nature of services provided.

Labor Market Information System

An advanced market information system that uses published and proprietary data sets should provide detailed analysis of:

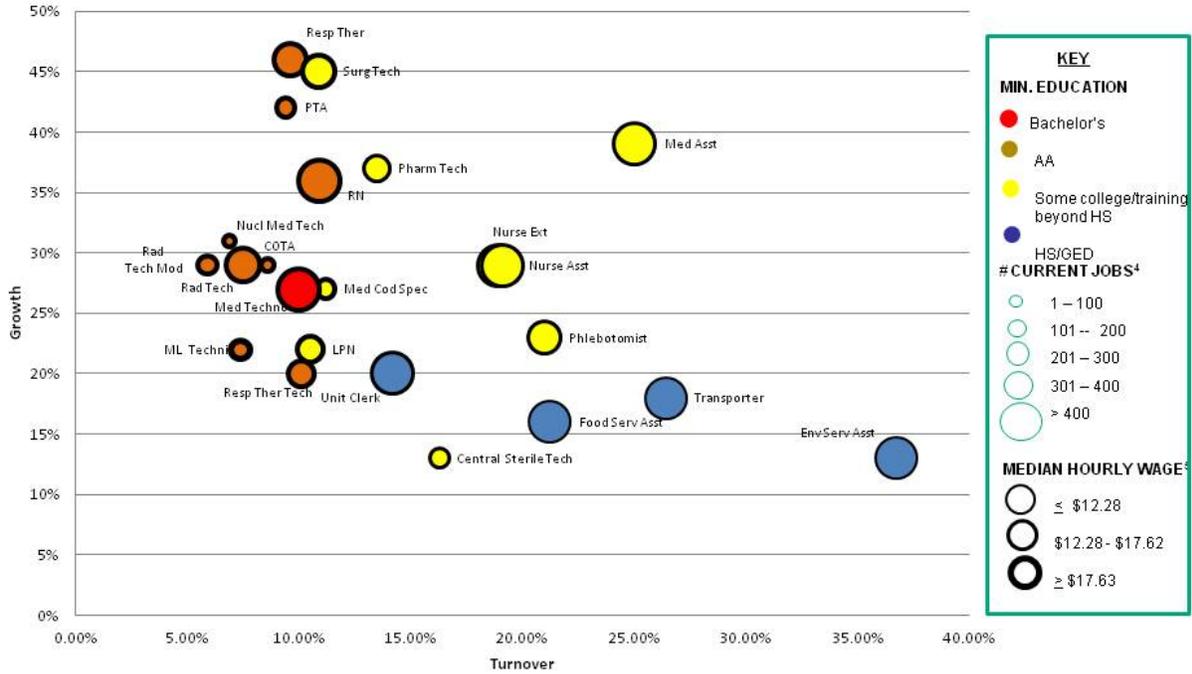
- Regional economy and sector demand for employees
- Industry and employer profiles
- Emerging occupations and clusters
- Online job postings by occupation
- Common and specialized skill requirements, credentials, and licenses
- Wage levels and trends

The labor market information system must be user-friendly for policy makers, managers, and frontline staff. It should help to answer such questions as:

- Is the education and training system meeting the demand for skills in the Triangle—now and in the next five years?
- How well is the supply system meeting that demand—collectively and by individual program operators?
- Which employers have demand in targeted sectors?
- What career pipelines (integrating academic and vocational education) should be developed for middle school through postsecondary education?
- What are growth opportunities, skill requirements, wages, and career potential for jobs in the Triangle?

The Baltimore Alliance for Careers in Healthcare initiative's "Demand on a Page" chart on the next page illustrates the kind of occupational information that should be readily accessible to students and parents as well as education and training staff.

Baltimore Alliance for Careers in Healthcare: Demand on a Page



¹Demand is shown for 21 of 33 jobs from BACH's acute care map for which both growth and turnover data were available. Not shown are: Admin. Asst., Departmental Secretary, Executive Asst., Inventory Mgt. Clerk, Medical Records Clerk, Patient Registrar, Receptionist, Scheduling Coordinator, & Telephone Operator.

²America's Career Infonet growth projections for Maryland for the period 2006 – 2016, www.acinet.org/acinet/

³Maryland Hospital Association (MHA), Hospital Personnel Survey for Calendar Year 2009, http://www.mdhospitals.org/mha/Health_Policy_Issues/HPS.MD.Hospitals.pdf.

⁴Maryland Health Care Human Resources Association (MHHRA) Spring 2010 survey.

⁵MHHRA Spring 2010 survey. The Md. Living Wage law establishes \$12.28/hour as the state's living wage. The Pennsylvania State University Living Wage Calculator establishes \$17.63/hour as the living wage for one adult and one child in Baltimore City; see <http://www.livingwage.geog.psu.edu/counties/24510>.

Source: Baltimore Alliance for Careers in Healthcare

Appendix D

Interviewees

The guidance of experts in Durham and throughout the country helped us develop our vision for Durham’s education-to-career system. Between November 2011 and August 2012, MDC staff met or talked with more than 95 practitioners and content experts. We’re grateful to everyone who shared their insight in face-to-face interviews, phone conversations, or email.

Local		
Name	Organization	Position
Fran Alexander	EDGE Training and Placement	Executive Director
Negussie Asfaw	N.C. Department of Commerce, Division of Workforce Security	Social Research Specialist
Karin Beckett	Durham Public Schools	Coordinator of Data and Accountability
Eric Becoats	Durham Public Schools	Superintendent
William V .Bell	City of Durham	Mayor
Laura Benson	Durham's Partnership for Children	Executive Director
MaryAnn Black	Duke University Health System	Associate Vice President for Community Relations
Susan Blackmon	YO: Durham	Executive Director
Thomas Bonfield	City of Durham	Manager
Jackie Brown	Durham Economic Resource Center	CEO
Kishia Carrington	Durham Public Schools	Director of Middle and High School Counseling
Heidi Carter	Durham Public Schools	Chair of School Board
Brianna Castro	Durham Public Schools	Former Latino Dropout Prevention Specialist
Qullie Coath	PROUD	Executive Director
Carol Collins	Community Partners, Inc.	Director of Vocational Services
Brendon Comer	Durham Technical Community College: Gateway to College	Former Program Director
Kevin Dick	Durham Office of Economic and Workforce Development	Executive Director
James Dickens	Durham Office of Economic and Workforce Development	Youth Program Coordinator
Bob Dill	IBM	Global Executive Client Technical Adviser
Dean Duncan	UNC School of Social Work	Professor and Foster Care Data Expert
Martina Dunford	New Horizons Academy of Excellence	Head of School

Victor Dzau	Duke University Health System	CEO
Gayle Erdheim	Achievement Academy	Interim Executive Director
Tyrone Everett	Center for Employment Training	Regional Director
Minnie Forte-Brown	Durham Public Schools	Vice Chair of the School Board
Barker French	East Durham Children's Initiative	Board Member
Christopher Gergen	Bull City Forward	Executive Director
Adrienne Gilby	Bull City Forward	Consultant
Kenneth R. Hammond	Union Baptist Church	Head Pastor
Bobbi Hapgood	NC Network of Grantmakers	Executive Director
Lea Henry	Durham Workforce Development Board: Youth Council	Chair
Tracy Himmel	Chapel Hill-Carrboro Youth Services Initiative	Program Director
Ellen Holliman	Alliance Behavioral Healthcare	Area Director
Brenda Howerton	Durham County Board of Commissioners	Member
Bryan Huffman	Durham YMCA	Executive Director
William Ingram	Durham Technical Community College	President
Kate Irish	Durham's Partnership for Children	Program and Evaluation Director
Teri Kaasa	Durham Technical Community College	Director of Research, Evaluation, Assessment, and Planning
Christine Kelly-Kleese	Durham Technical Community College	Dean of Student Engagement and Transitions
James Key	Durham Public Schools	Area Superintendent of High School Curriculum, Instruction, and School Improvement
Juli Kim	North Carolina Network of Grantmakers	Program Director
Daniel Kimberg	Student U	Executive Director
Jason Langberg	Advocates for Child Services with N.C. Legal Aid	Equal Justice Works Fellow
Bud Lavery	Communities in Schools	Executive Director
Otis Lyons	Campaign 4 Change	President
Nick McCoy	Durham Office of Economic and Workforce Development	Senior Workforce Development Manager
Mical McFarland	N.C. Department of Commerce	Policy Analyst, Division of Workforce Development
Theresa McGowan	Durham Public Schools	Coordinator for Prevention Services
Terri Mozingo	Durham Public Schools	Assistant Superintendent of Research and Accountability

Angelica Oberleithner	Durham's Partnership for Children	Assistant Director
Sandy Ogburn	Achievement Academy of Durham	Former Director of Administration
Eric Olson-Getty	YO:Durham	Internship and Mentor Coordinator
Ann Oshel	Durham County System of Care	Director
Gudrun Parmer	Durham County Criminal Justice Resource Center	Director
Michael Page	Durham County Board of Commissioner	Chair
Steven Pearson	IBM	Manager for Corporate Citizenship & Corporate Affairs
Kevin Pickett	N.C. Department of Commerce	Social/Clinical Research Specialist, Division of Employment Security
Deborah Pitman	Durham Public Schools	Assistant Superintendent
John Quintero	South by North Strategies	Principal
Ellen Reckhow	Durham County Board of Commissioners	Vice Chair
Malcom Reed	Durham Literacy Center; D3 Community Outreach	GED teacher; Executive Director
Cassandra Richards	Communities in Schools of Durham	Research Analyst
Pilar Rocha-Goldberg	El Centro Hispano	Executive Director
Mike Ruffin	County of Durham	Manager
Sheila Ryba	John Avery Boys and Girls Club	Executive Director
Eunice Sanders	Durham Public Schools	Former Assistant Superintendent for Student Support Services
Steve Schewel	City of Durham	City Council Member
Rick Sheldahl	Durham Public Schools	Director of Career and Technical Education
Maya Sirur	Durham Youth Employed and Succeeding	Program Manager
Edward Skloot	Duke Center for Strategic Philanthropy and Civil Society	Director
Casey Steinbacher	Durham Chamber of Commerce	President and CEO
Durham Student Focus Group	New Horizons Academy of Excellence	Nine Students
Durham Student Focus Group	Durham Youth Employed and Succeeding	Six Students
James Stuit	Durham County	Gang Reduction Strategy Manager
Mark Trustin	Trustin Law; co-founder of Durham PROUD program	Attorney
Vinicius Vial	Criminal Justice Resource Center	Case Manager

Jennifer Weiss	Duke University Nicholas School of the Environment	Candidate for Master's in Environment Management
Julie Wells	Partners for Youth	Executive Director
Thomas White	N.C State University Economic Development Partner	Director
Jan Williams	Healthy Families Durham	Executive Director
Mel Williams	End Poverty Durham	Convener
Phail Wynn, Jr.	Duke University	Vice President for Durham and Regional Affairs
National		
Steve Dobo	Zero Dropouts	President
Ernest Dorsey	Baltimore Office of Workforce Development	Assistant Director for Youth Services
Ian Faigley	Forum for Youth Investment	Senior Manager for Partnerships and Communications
April Goff Brown	Capital Workforce Partners, Inc.	Consultant
Richard Greenwald	Public/Private Ventures	Former Acting Vice President
Bret Halverson	JobsFirst NYC	Consultant
Linda Harris	Center for Law and Social Policy	Director of Youth Policy
Conor Hartman	Center for Inter-faith Action on Global Poverty	Director for Strategy and Development
Ron Hearn	Baltimore Alliance for Careers in Health	Executive Director
Thomasina Hiers	City of Baltimore	Acting Chief of Staff of the Mayor
Stacy Holland	Philadelphia Youth Network	Co-Founder, President and CEO
Barbara Hopkins	Baltimore Alliance for Careers in Healthcare	Consultant
Julie Kerksick	Colorado Office of Economic Security	Director
Larry Pasti	Ready by 21	Director of Field Services
Nicole Prchal Svajlenka	Brookings Institution	Senior Research Analyst, Metropolitan Policy Program,
David Riemer	Community Advocates Public Policy Institute	Senior Fellow
Martha Ross	Brookings Institution	Fellow, Metropolitan Policy Program
Neil Sullivan	Boston Private Industry Council	Executive Director
Michael Wald	Stanford University	Professor Emeritus

Appendix E

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¹ N.C. Department of Commerce and EMSI Covered Employment-2012.1. Between 2011 and the end of 2021, Durham County’s 21.6 percent projected increase in jobs outpaces North Carolina (18 percent), United States (12 percent). In 2011, Durham had 180,075 “covered jobs”, which does not include government, military or self-employed positions, and is expected to have 218,892 covered jobs by the end of 2021. Of note, about half of Durham’s workers are employed outside of the county, so these are only a sample of the jobs for which Durham residents will need to be competitive.

² U.S. Census Bureau. 2010 Decennial Census. Note that this is a total of all current 14-to-24 year olds who live in Durham, and includes students at our local Universities who may originate from elsewhere. It is difficult to tell the number of Durham residents who also went through Durham K-12 education using current data sources, but that would be easier with more accessible data from the common follow-up system, described in Section Five on the Policy Reform Agenda.

³ Although our focus is ages 14-24, the calculation for the number of disconnected youth includes only ages 15 to 24 because of limitations in existing data sources. The number was calculated using a formula originally developed by Wald and Martinez (2003) and localized with the assistance of John Quintero at South by North Strategies, LLC. For calculating the number of disconnected and at-risk youth ages 15 to 19, we add the youth who are out-of-school and without a high school degree, unmarried mothers, teens in foster care, and youth incarcerated or on probation and subtract any double counting. For calculating the number of disconnected and at-risk youth ages 20 to 24, we add the long-term unemployed, incarcerated, those without a high school degree, and unmarried mothers and subtract any double counting. The calculation is for the average number of disconnected and at-risk youth and young adults in the years 2006 through 2010. Calculating the number of disconnected and at-risk youth and young adults with this formula accurately for any one year is impossible because of the margin of error of existing data sources.

⁴ David L. Dodson et al. *Disconnected Youth in the Research Triangle Region: An Ominous Problem Hidden in Plain Sight*. A report to the N.C. Glaxo SmithKline Foundation. (Durham, NC: MDC, 2008). Available at <http://www.mdcinc.org/sites/default/files/resources/disconnected-youth.pdf>

⁵ Analysis using microdata from the U.S. Census Bureau, 2006-2010 American Community Survey. Methodology from Martha Ross and Nicole Prchal Svajlenka of the Brookings Institution, Metropolitan Policy Program. Data credit to Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2010. This figure excludes those who are living in group homes, because individuals in prison and in college dormitories likely do not earn income and therefore would artificially inflate data on poverty.

⁶ U.S. Census Bureau. 2010 Decennial Census.

⁷ U.S. Census Bureau. 2010 American Community Survey

⁸ Ibid.

⁹ N.C. Department of Corrections. Averages of the years 2008-2011.

¹⁰ U.S. Census Bureau, 2008-2010 American Community Survey. Note that the unemployment rate measures the percentage of people in the labor market looking for work who do not have a job. It does not include those in school and not looking for work or out of school and not looking for work.

¹¹ Data provided upon request from the N.C. Department of Commerce, Division of Employment Security

¹² U.S. Equal Employment Opportunity Commission. Average of 2009 and 2010.

¹³ Chart from Anthony Carnevale and Stephen J. Rose. *The Undereducated American* (Washington: Georgetown University Center on Education and the Workforce, 2011). Local data from the 2010 American Community Survey.

¹⁴ Anthony P. Carnevale, Nicole Smith, and Jeff Strohl, "Help Wanted: Projections of Jobs and Education Requirements through 2010" (Washington: Georgetown University Center on Education and the Workforce, 2010).

¹⁵ U.S. Census Bureau. 2010 American Community Survey.

¹⁶ Clive R. Belfield, Henry M. Levin and Rachel Rosen, *The Economic Value of Opportunity Youth* (City University of New York, 2012). The formula for fiscal burden includes lost tax payments, public expenditures on crime, public expenditures on health, expenditures on supports such as workforce training, expenditures on transfer payments, and also the savings from lower subsidies for public school and higher education. Much of the cost, including policing and loss of property taxes, occurs at the local level. Our figure is actually a conservative estimate; for example, researchers at Northwestern University found that each high school dropout in Philadelphia costs taxpayers about \$319,000 over a lifetime. The social burden, also from Belfield et. al., adds lost earnings, costs to crime victims, private health costs, general economic losses that come from a less educated workforce, as well as the saving from private education fees.

¹⁷ This framework is adapted from several nationally recognized approaches to segmenting youth. MDRC, a national research and evaluation organization, uses a continuum of five points, from least to most disconnected. A widely cited framework for dropout recovery, developed by Dr. Robert Balfanz, segments youth into four categories using age and distance from graduation: old and far, old and close, young and far, and young and close. MDC has developed a framework that encompasses both high school and college, while recognizing that youth and young adults require different support.

¹⁸ In the last four years, between 63 and 78 percent of Durham students have graduated with the class in which they entered high school. That graduation rate has increased the last three years. So, as high as 78 percent of Durham's students are on-track through high school. However, the percent that is on track to proper credentials with living wage value is lower, as many students leave high school and do not complete a postsecondary degree. Based on historical data, the percentage of older Durham residents who received some form of college by the age of 25, we know that only 45 percent of 25-to-34 year olds in Durham County attended some form of college, indicating a sizeable fall off after completing high school. We also estimate, using US Census microdata, that 45 percent of current 25-year-old residents have some form of postsecondary education and a full-time job. The Common Follow-up System, hosted by the N.C. Department of Commerce, would allow Durham to track a cohort of students through the high school system and into postsecondary, identifying when and if a cohort is leaving the pipeline. However, repeated requests for access to that public, aggregate data were denied. Although the data exist, because of current access issues, it would be difficult to identify where Durham students go after high school. Thus, our 60 percent estimate is very rough and combines the increasing high school and postsecondary completion rates to suggest that we will have a natural increase in postsecondary attainment if the county continues current patterns of improvement within both secondary and postsecondary institutions.

¹⁹ The "behind" category includes those 14 and over who are more than one grade-level behind their peers within the K-12 school system, those who have dropped out, but have a clear path back into the system, those who never connected with college, and those who dropped out of college before receiving any postsecondary credential. Ideally, we would calculate a figure for each of those categories, but unfortunately the limited access to data makes that impossible. We estimate the percent of students in this group by examining educational attainment for young adults ages 18 through 24, and then assume that the percentage is similar for younger students as well. This is a limited measure, but it is the measure for which we have the most reliable data. There are approximately 30,655 young adults in that age range, according to the 2006-2010 American Community Survey. Roughly 11,144 of those young adults are undergraduate students at N.C. Central University or Duke University, and therefore from all around the state and country. Although those students are important to the city, we want to focus on those who have gone through the Durham education-to-career system, so we don't count them in this calculation. That leaves about 19,511 young adults who are not enrolled in a four-year university. Out of this group, approximately 1,357 are enrolled in Durham Public Schools, including 978 in the 12th grade and therefore on-track to graduate. According to the American Community Survey, about 22 percent of the non-four-year attending students are

either not in high school or behind in high school and without a high school degree. In addition, about 26 percent have a high school degree but no college. That leaves 48 percent of students, but importantly does not include those who have left the county for college or Durham residents who are enrolled in NCCU or Duke University. Therefore, we estimate 40 percent who are either behind or disconnected.

²⁰ We estimate that this represents between 4,500 and 6,000 youth and young adults. See footnote 3.

²¹ U.S. Census Bureau, Center for Economic Studies

²² “The Best Places for Business and Careers”

http://www.forbes.com/best-places-for-business/list/#p_1_s_a3_All%20states_

Raleigh ranks 13th and Durham ranks 31st, and 12 of the top 35 Metropolitan Statistical Areas are located in Texas. The data for job growth includes past and projected growth, as well as income growth. Both the Durham and Raleigh MSAs rank in the top 20 for “The Best Places for Businesses and Careers”, which also takes into account educational attainment and cost of business.

²³ U.S. Census Bureau, Center for Economic Studies

²⁴ N.C. Department of Commerce and EMSI Covered Employment - 2012.1

²⁵ U.S. Census Bureau. Decennial Census and Center for Economic Studies. We use the age under 29 years old because it is the best category to show young adults with the available data from the Center for Economic Studies. In 2002, 26,184 Durham residents under the age of 29 held jobs. By 2010, that number had decreased to 23,071, for a total decrease of 3,113. That decrease came mostly from jobs paying between \$1,251 and \$3,333 per month. In 2000, there were 55,829 Durham County residents between the ages of 16 and 29. In 2010, there were 63,665 Durham County residents between the age of 16 and 29. The 6,300 increase between 2002 and 2010 assumes that population grew at a steady rate between 2000 and 2010. This would suggest that at a time of great job growth in Durham and the Triangle, the employment rate for Durham young adults, under the age of 29, went from about 47 percent to 36 percent.

²⁶ City of Durham. *Durham's Got It!: FY 2012-13 Strategic Plan* (Durham, NC: 2012), 14.

http://www.durhamnc.gov/strategicplan/pdf/strategic_plan.pdf

²⁷ Durham County, *Steering the Way: Durham County Strategic Plan* (Durham, NC: 2012), 11.

http://www.co.durham.nc.us/departments/bocc/Strategic_Plan/PDF/2012_Durham_County_StrategicPlan_Final.pdf

²⁸ Durham Public Schools, *One Vision. One Durham* (Durham, NC: 2011), 31.

<http://www.dpsnc.net/stratplan/pdf/dpsstrategicplan.pdf>

²⁹ IBM, *IBM's Smarter Cities Challenge Durham Report* (Armonk, NY: IBM Corporate Citizenship and Corporate Affairs, 2012) http://durhamnc.gov/ich/cmo/Documents/ibm_scc_report.pdf

³⁰ The current number of 25-year-olds in Durham who have a postsecondary degree and work at least 30 hours per week is estimated to be 45 percent, with a margin of error of approximately seven percentage points. This estimate excludes those who are enrolled in any form of graduate school. Methodology courtesy of Martha Ross and Nicole Prchal Svajlenka of the Brookings Institution, Metropolitan Policy Program. Analysis using microdata from the U.S. Census Bureau, 2006-2010 American Community Survey. Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2010.

³¹ Brown, April Goff. *Funding for Hartford Youth Ages 14-24* (Hartford, CN: City of Hartford and Capital Workforce Partners, 2005)

³² Peter T. Ewell, Dennis P. Jones, and Patrick J. Kelly, *Conceptualizing and Researching the Educational Pipeline* (Boulder, CO: National Center for Higher Education Management Systems, 2003)

³³ Class of 2010-2011. CTE Local Planning System. N.C. Department of Instruction. The higher graduation rates for CTE enrollees apply across economic and racial lines. For students enrolled in CTE, graduation rates were seven percentage points higher for those who receive free-or-reduced price lunch, 14 points higher for Latinos, 11 points higher for African Americans, and two points higher for whites.

³⁴ Personal communication with Steve Dobo of Zero Dropouts

³⁵ National Education Association Education Policy and Practice Department. *Raising Compulsory School Age Requirements: A Dropout Fix?* (Washington, DC: National Education Association, 2012)

³⁶ Youth Accountability Planning Task Force. *Final Report to the General Assembly of North Carolina* (Raleigh, NC: 2011)

³⁷ Lee, John B., Ellen Frishberg and Gina M. Shkodriana, *North Carolina Community College System: Study on the Admission of Undocumented Students into the North Carolina Community College System* (Bethesda, MD: JBL Associate, In., 2009)

³⁸ Batalove, Jeanne and Michelle Mittelstadt. *Relief from Deportation: Demographic Profile of the DREAMers Potentially Eligible under the Deferred Action Policy* (Washington, DC: Migration Policy Institute, 2012)

³⁹ U.S. Census Bureau. 2010 Decennial Census

⁴⁰ In 1991-1992, 182 Durham Public School students identified as Hispanic, compared to 1,767 in 2000-2001, and 7,295 in 2011-2012. N.C. Department of Public Instruction, *Beyond 2020*

⁴¹ Passel, Jeffrey and D'Vera Cohn. *Unauthorized Immigrant Population: National and State Trends, 2010* (Washington, Pew Hispanic Center, 2010).

⁴² "America's Most Tolerant Cities, from San Francisco to New York."

<http://www.thedailybeast.com/galleries/2012/01/16/the-u-s-s-most-tolerant-cities-photos.html#slide21>

⁴³ Tuition from N.C. Colleges goes to the state general fund and back to the Colleges. So, the actual contribution from the state to the college is lower. In the case of Durham Technical Community Colleges, the true contribution of the state government is closer to 56 percent.

Research, Evaluation, Assessment and Planning Staff. *Durham Technical Community College Fact Book*, (Durham, NC: 2012), 28

⁴⁴ Quinterno, John. *Making Performance Funding Work for All* (Chevy Chase, MD: The Working Poor Families Project, 2012)

⁴⁵ Quinterno, John. "Key Issues Facing the N.C. Community College System: Enrollment Trends, Faculty Compensation, Funding Formulas, and Strategic Planning." *N.C. Insight* (Raleigh, NC, 2008)

⁴⁶ The Data Quality Campaign, a national nonprofit organization advocating for data that allows our educational and workforce system to make better, more informed decisions, says that all of the key elements for a comprehensive data system exist in North Carolina. However, the Campaign concludes that the state has not created sustained support for the system, does not provide timely access to information, and does not create progress reports for individual students to improve student performance.



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