A Pilot Phase Analysis of King County, Washington's PathNet Program

Years 1 and 2 combined

The Vera Institute of Justice

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INTRODUCTION

Like many jurisdictions around the country, King County, Washington has seen significant school dropout rates over the last few years. During the 2011-12 school year 12 percent of high school students who were initially enrolled dropped out before the year ended, and an additional 21 percent did not graduate on time.[1] Perhaps not surprisingly, these negative outcomes are even more prevalent among justice-system involved youth. According to the most recently available local data, approximately 26 percent of school-age youth on probation were not enrolled in school, and an additional 61 percent were in school, but significantly behind in grade level and/or credits.[2]

In response to these significant drop-out rates, and their concentration among youth in the juvenile justice system, youth-serving organizations and community and government stakeholders in King County came together in 2005 to create the Education Integration Task Force, and specifically to develop a comprehensive, integrated, and community-based approach for preventing and retrieving system-involved youth from dropping out. The approach that was developed became known as PathNet—named for its grounding in a "path of networked organizations" that monitor and provide services to youth—and it was implemented as a pilot program in 2010 with the support of the MacArthur Foundation's Models for Change Initiative. The goal of the PathNet program is to connect youth to a pathway that will help them achieve positive outcomes—especially in the educational and vocational arenas.

As part of its implementation efforts, PathNet leaders asked the Vera Institute of Justice (Vera), a member of the Models for Change National Resource Bank, to help them monitor and provide feedback on programming activities during its pilot phase (June 2010-May 2012). With that in mind, in 2011 Vera conducted a descriptive analysis of youth who entered PathNet during its first year of operation and replicated the analysis for Year 2 youth (with a more expansive list of measures) in 2012. The purpose of these analyses was to provide PathNet and other stakeholders with an overview of who these youth were—including their risks, needs, and program activities—as well as to highlight their preliminary outcomes related to education, vocation, and justice system involvement, with the larger goal of helping PathNet leaders refine the program in ways that allow them to most effectively serve youth.

The findings from each of these analyses were written up and presented to PathNet program leaders in separate reports (the Year 1 and Year 2 reports, respectively). Additionally, to provide a more comprehensive picture of program youth during the full, two-year pilot phase, we carried out the analysis on both groups combined. This report presents the findings of the combined analysis.

As was outlined in the Year 1 and Year 2 reports, the report begins with a brief overview of the PathNet process, as was outlined in the original reports, intended to provide readers with an understanding of program operations that will help in interpreting the main findings of our work. From there we describe the methodology we employed—including the data, sample, and variables of interest. Finally, the report ends with a detailed discussion of our findings, which

[1] http://datacenter.kidscount.org/data/bystate/chooseindicator.aspx?state=WA&cat=2025.
[2] http://www.cwla.org/programs/juvenilejustice/pathnet.pdf

are divided into two sections. We begin by describing the background characteristics of youth who entered the program during the pilot phase; then we present findings on preliminary outcomes. It is important to stress that the analyses we conducted do not constitute an outcome evaluation of the PathNet program; rather, they provide a more detailed snapshot of young people who participated in the program during its two-year pilot phase. The analysis of outcomes in particular is only preliminary; to evaluate the impact of the program on educational progress and justice system involvement requires a more rigorous statistical analysis with a comparison group.

THE PATHNET PROCESS

In order to fully appreciate the findings that are presented in this report, it is important to first have a basic understanding of how PathNet was designed to operate. With that in mind, in this section we provide a brief overview of the program's goals, processes, and case flow.

While PathNet is often referred to as a program, it is actually more of an *approach* to serving youth with educational needs—a system-wide, community-based approach that links young people to a broad network of community organizations for case management and needs-based programming and monitors them once they enroll in these services. At its core, the PathNet approach is designed to achieve two goals: (1) prevent at-risk youth from dropping out of school; and (2) re-engage (or retrieve) those who have already dropped out of the educational system. There are thus two target populations for the program—youth who are assessed as high risk for dropping out, and youth who have already dropped out. It should be noted that during the pilot phase, PathNet targeted only youth in the second category—or, more specifically, youth in the second category who were also on probation in King County.[3] Given this more limited initial target population, we focus our description of program goals and operations below to those associated with the dropout retrieval effort.

In terms of broad goals and parameters, the dropout retrieval effort focuses on re-engaging unemployed, out-of-school youth ages 14 to 21 in school and employment activities. In this context, **out-of-school youth** are defined as those who are either: (1) not enrolled in any school *and* do not have a diploma; (2) participating in a General Education Diploma (GED) program; or (3) significantly disengaged, chronically truant, and without hope of achieving a high school diploma. Through extensive networking, PathNet partners attempt to link these youth to existing educational/vocational programs and/or employment opportunities. While in some cases, this means that youth will re-enroll in traditional high school, the majority of youth who enter the program will start with a service designed to help them attain a GED or a "GED*Plus*," defined by the PathNet Executive Committee as attainment of a GED and successful transition to post-secondary education and/or employment.[4]

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[3] This decision was driven partially by the program leaders' desire to "start small" and partially for reasons of practicality. Ultimately when the program is through the pilot stage the goal is to receive referrals through multiple sources including self-referrals, parents, mental health agencies, social service agencies, and community-based organizations. Expansion of the pilot program to a broader population and eventually to other Educational Service Districts across the state will also be undertaken after a successful model has been implemented.

[4] http://www.cwla.org/programs/juvenilejustice/pathnetstrategies.pdf

Currently, youth are referred to PathNet from probation at the point of intake, based on the three criteria outlined above (out-of school, unemployed, and 14-21 years of age). Generally, probation intake officers offer the program to all youth who meet these criteria, though PathNet is not a mandatory condition of probation so youth have the option of declining if they do not want to participate. It is only once a youth expresses interest in receiving services through PathNet that a referral is made.

Once a referral is made, the youth meets with a Connections Coordinator at PathNet who administers a strengths-based assessment to learn more about his/her risks, needs, and assets. [5] The assessment is homegrown in that it was developed by PathNet staff, and among the areas in which it gathers information are school history, current school status (which includes a youth's enrollment status in school and his/her educational goals), living situation and support systems, use of free time, and employment status. In addition to the assessment, the Connections Coordinator also conducts an informal interview with the youth to gain a more in-depth perspective on his/her educational and vocation goals—including why he/she has those goals, what support networks are available that may help him/her achieve those goals; and what aspects of schooling and/or education have been challenging in the past.

Once the assessment and interview are complete, the coordinator then works with the youth to develop a plan designed to help him/her achieve his/her goals. The plan is "student-driven" in that the youth plays an active role in putting it together and that it draws very heavily from the information gathered in the assessment and the interview. It also contains a number of specific components. Primary among them are an outline of the youth's educational goals and the "track"— GED, GED*Plus*, or high school—that will best help him/her achieve those goals. The plan also lists the specific services in which the youth will participate as part of that track, as well as other needs he/she has that may impact his/her ability to achieve those educational/vocational goals. It should be noted that one major goal of the PathNet program is for all youth in the GED track to eventually be on the GED*Plus* track. PathNet staff work hard to help youth gain the skills necessary for postsecondary study and employment. In addition, those young people in the high school track are often coupled with employment training and/or summer learning opportunities.

After the plan is developed, it must be agreed upon by both the Connections Coordinator and the youth, and from there the youth is linked to programs that best fit his/her individual plan to begin services. Because participation is not required, it is stated that youth are not formally sanctioned if they do not attend services or if they fail to meet their stated goals through those services. Given the strong desire of PathNet leaders to see youth achieve these goals, however, the program does provide them with support as they work through their respective tracks. Specifically, throughout their participation in services, youth receive support from adults known as "care managers" who are responsible for ensuring that they stay on the right path and continue to stay engaged in programming. Care managers serve as a mentors (as opposed to case managers, whose main role is supervision), and can be either someone who volunteers with

[5] The Connections Coordinator is formally employed by the Puget Sound Educational District, the home agency out of which PathNet is run; and assessing youth for PathNet is one of a number of duties the coordinator performs in the District.

PathNet and is appointed through the program (for example a teacher or a formal community-based mentor) or a caring adult in the youth's life who officially takes on the role.

In Figures 1A and 1B below, we present two concept maps: 1) The PathNet Systems-Change Model and 2) the PathNet Model Flowchart.

Figure 1A

PathNet

A Networked Reengagement System

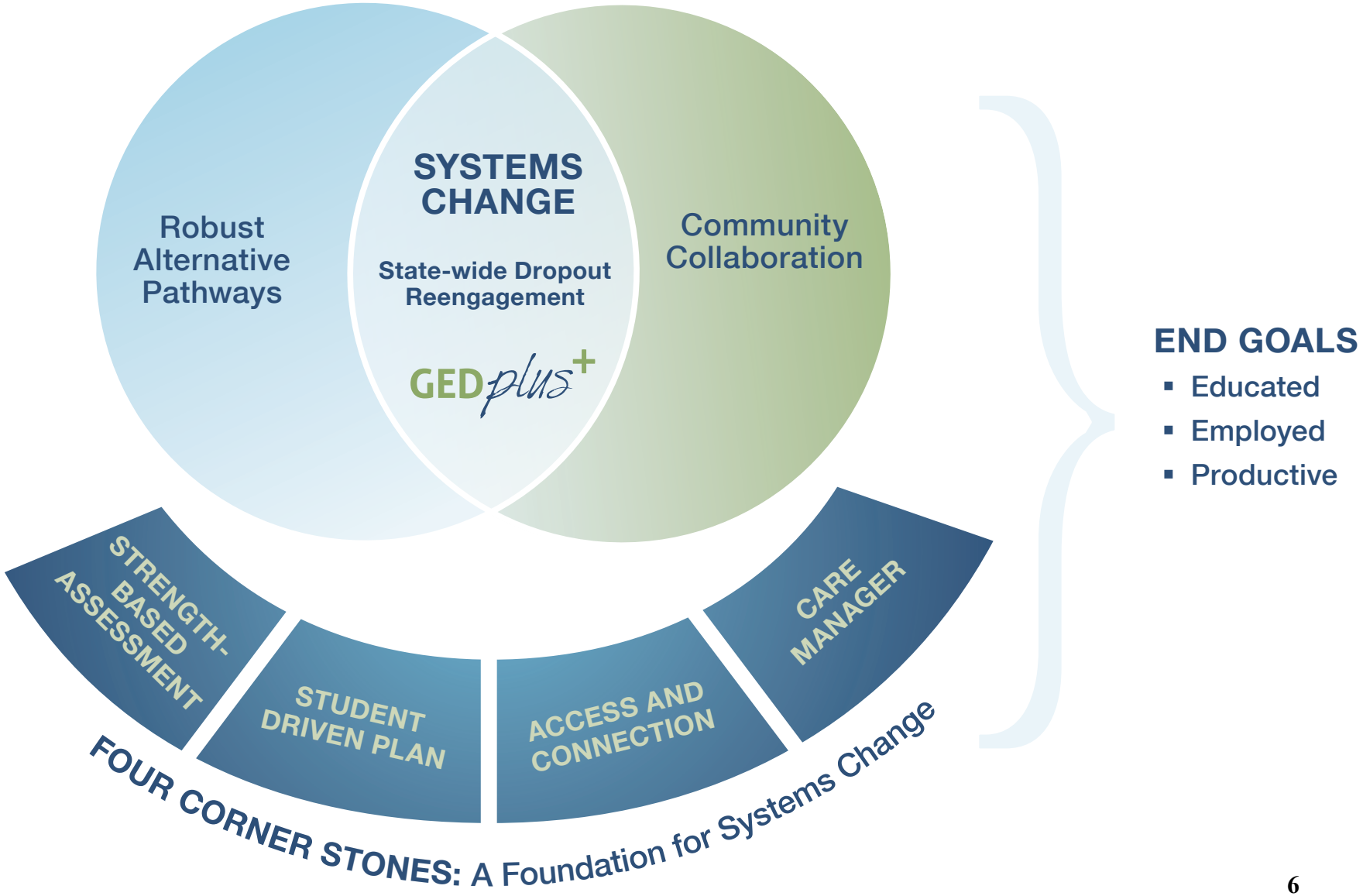
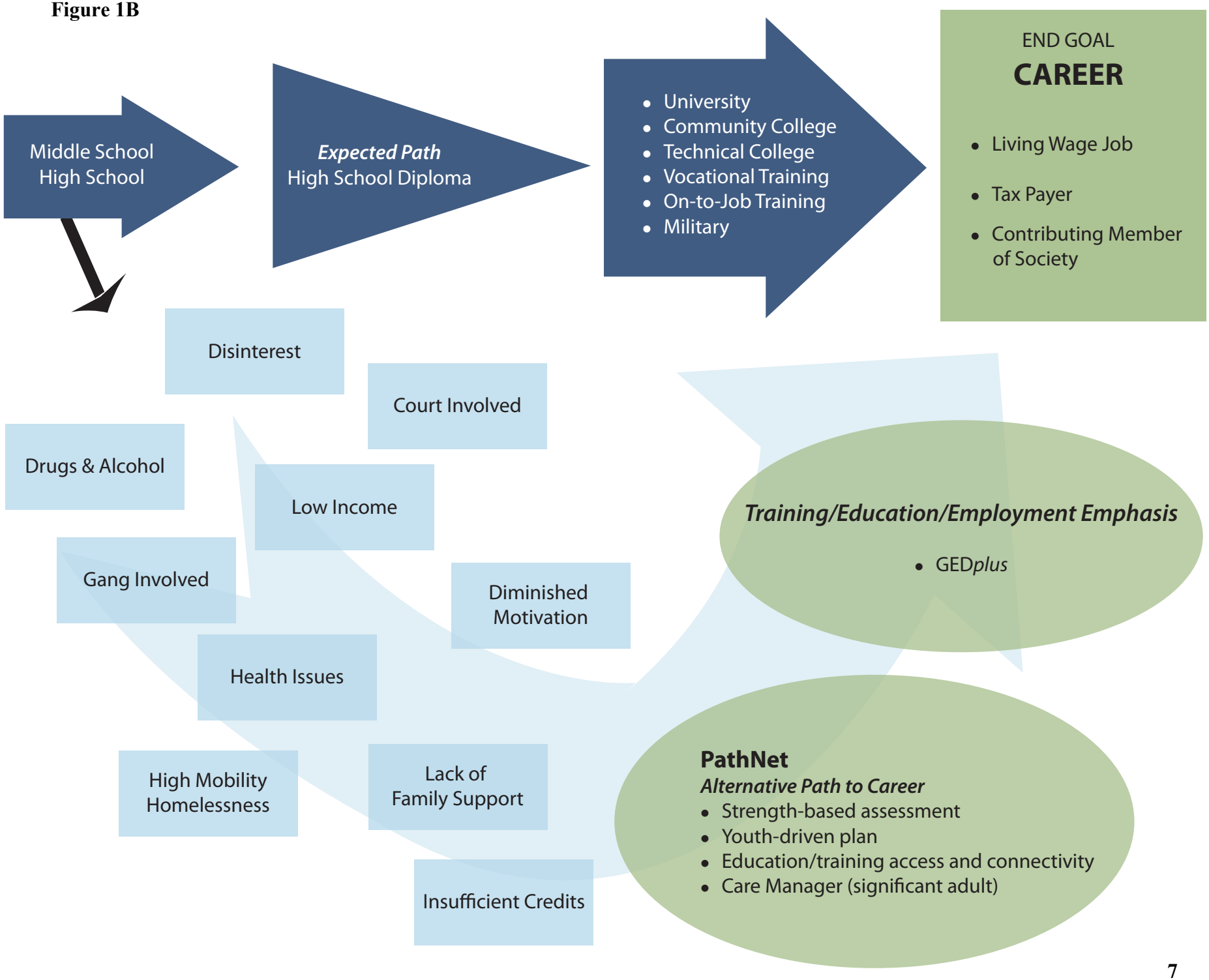


Figure 1B


Middle School
High School
Expected Path
High School Diploma
University
Community College
Technical College
Vocational Training
On-to-Job Training
Military
END GOAL
CAREER
Living Wage Job
Tax Payer
Contributing Member of Society
Disinterest
Court Involved
Drugs & Alcohol
Low Income
Gang Involved
Diminished Motivation
Health Issues
High Mobility Homelessness
Lack of Family Support
Insufficient Credits
Training/Education/Employment Emphasis
GEDplus
PathNet
Alternative Path to Career
Strength-based assessment
Youth-driven plan
Education/training access and connectivity
Care Manager (significant adult)

METHODOLOGY

To provide PathNet leaders and other stakeholders with a snapshot of youth in the program during its pilot phase, Vera obtained and analyzed data on all youth who participated in the initiative in the 2010-2012 school years—127 youth in Year 1 and 84 youth in Year 2, for a total of 211 individuals[1]—and carried out a descriptive statistical analysis on information in two main areas: (1) youth characteristics; and (2) preliminary youth outcomes (both educational and juvenile justice, given that the target population during the pilot phase was referred by Probation). The majority of data employed in this combined analysis was the same as that used in the Year 1 and 2 reports (meaning, it was not updated after June 2011 and June 2012, when it was originally collected for each of the two groups). The only exception was recidivism outcome data for Year 1 and Year 2 youth, which were extended to September 2012 to provide for a more robust measure. In each of the two main areas of findings, we conducted analyses on the full cohort of youth. We also broke the analyses down by program track (GED, GED*Plus*, and high school) wherever it made sense to do so, to look at differences within the population of youth served.

The majority of the data for this analysis came from an Access database maintained by the PathNet program. PathNet developed this database in 2010, with Vera's assistance, to track background characteristics and outcomes among youth who enter the program. Specifically, the database includes information on the following for each youth in the program:

- Demographics
- Educational history
- Selected risks and needs
- Educational outcomes
- Vocational outcomes

Additionally, to examine preliminary juvenile justice outcomes among youth in the program, we obtained recidivism data—including juvenile referrals, juvenile adjudications, and adult convictions—from the Washington State Administration of the Courts (AOC). These data were sent directly to Vera from AOC, which we then linked to the PathNet dataset using a unique identification number that was included in both the PathNet and AOC database. We also supplemented the background information gleaned from the program's database with youth scores on the Washington State Juvenile Court Assessment (WSJCA), a risk and needs assessment created by the Washington State Institute for Public Policy that is administered to every youth in the state at the time of adjudication to help inform program and case management planning. Among the scales that comprise the instrument are criminal history and school suspension/expulsion.

Table 1 presents a complete list of data elements employed in the analysis.

[1] This total includes five youth who carried over from Year one of PathNet (on the same case) and eight youth who were re-admitted a second time, all of whom were counted as two separate cases, as per PathNet stakeholder recommendation.

Table 1. Data Elements Included in the Analysis

Data Elements
Demographics
Gender
Race/Ethnicity
Age
Risk/Needs Factors
Foster Care Status
Homeless Status
WSJCA
Risk Level
Criminal History
School Suspension/Expulsion
Education Background
CASAS Reading Scores
CASAS Math Scores
IEP History
Educational Outcomes
GED Level
Post-secondary Education
Job Training
Employment
Justice Outcomes
Referrals
Adjudications
Convictions

FINDINGS

In this section we present the findings of our descriptive analysis. The analysis examined both background characteristics of youth who entered the program during the pilot years, and their preliminary outcomes, and this section is divided into two subsections that correspond to these target areas. We begin with the descriptive picture of background characteristics; from there, we present preliminary program outcomes—first those related to educational/vocational involvement, and then those related to juvenile/criminal justice system involvement during the program.

Overall, we found that:

- Youth in the PathNet pilot phase have high levels of educational needs. Among youth for whom special education status was available, thirty-seven percent (65 out of 176) were classified as having been part of an Individualized Education Program (IEP) at their previous school or having a special education need in the past. A high proportion also exhibited reading and math levels that were substantially below grade level (using age to determine the grade level at which they should be). Eighty-one percent of PathNet youth were reading below their grade level, and 91 percent of PathNet youth had math skills below their grade level.

- In addition to educational needs, PathNet youth also have significant levels of other risk and needs. More than three quarters of the sample were classified as high or medium risk on the Washington State Juvenile Court Assessment (53 percent and 30 percent in each group, respectively), which is comprised of items ranging from criminal history to alcohol and drug use and mental health needs. Additionally, sixty-three percent (or 133 youth) were either currently involved, or had past involvement, with Children's Administration, and 8 percent (or 16 youth) were classified as living in foster care.

- The large majority of youth who enrolled in PathNet during the pilot were on a GED (as opposed to high school) track. In contrast to the 53 percent who enrolled in the GED*Plus* track and the 37 percent in the GED track, only 10 percent enrolled in the high school track.

- Among those who entered a GED-based track, many achieved some sort of significant progress toward a GED during the second year. Almost half (43 percent, or 81 youth) of youth in the GED or GED*Plus* track earned a GED during this time, and an additional 15 percent (29 youth) passed more than half of the five tests.

- Using standardized follow-up periods for the recidivism analysis to look at how many youth were re-referred to the Prosecutor's office, we found that at six months, twenty percent of pilot phase youth were re-referred and, at 12 months, forty-three percent of pilot phase youth had a new referral. However, most of those referred for prosecution were referred mostly for less serious offenses, relatively speaking (misdemeanors as opposed to felonies and property as opposed to person offenses).

Section I: Youth Characteristics

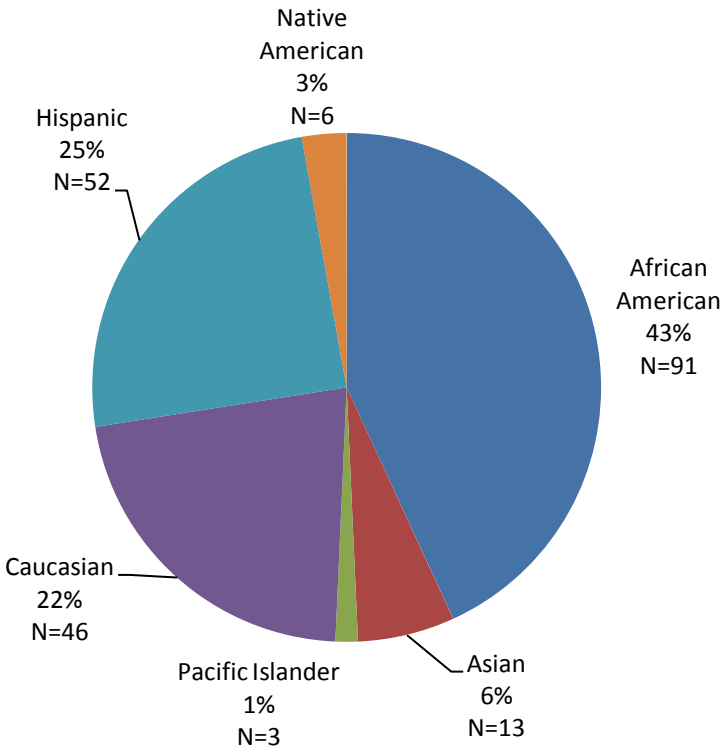
Our analysis of youth characteristics focused on three areas that are highly relevant to the goals and parameters of the PathNet program: demographics, educational history, and risk and needs factors. Here we present our findings in each of these areas. We begin with overall trends among the cohort, and then we break them down by program track.

Characteristics of the overall sample

Demographics

Consistent with many programs that serve youth in the juvenile justice system, the largest proportions of youth in PathNet during the pilot phase were male and African American. Of the 211 youth who were referred during this time, seventy-two percent (or 151) were male, and 43 percent (or 91) were classified as African American (*see* Figure 2 for a breakdown of pilot phase youth by race). The next most prominent racial groups were Hispanic youth and white youth at 25 percent (52 youth) and 22 percent (44 youth) of the group, respectively. Asian, Native American, and Pacific Islander youth, in turn, comprised the smallest percentages of the cohort during the pilot phase (as shown in Figure 2, only ten percent of PathNet youth fell into this category).

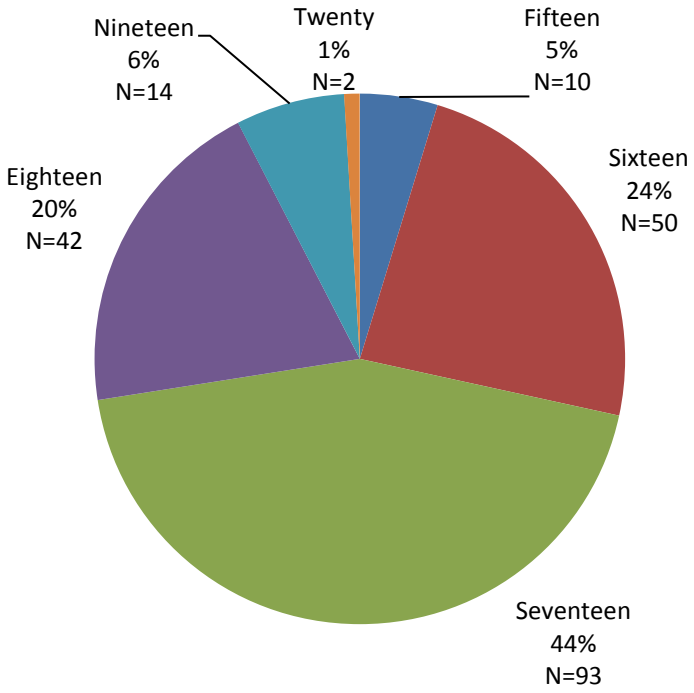
Figure 2. PathNet Pilot Youth by Race/Ethnicity (N=211)



In addition to gender and race, we also examined the age range of youth in PathNet during the first two years and found that, young people ranged from 15 to 20 years of age, with an average age of 17 and the largest proportion of youth (88 percent) falling between the ages of 16 and 18. As emphasized in the previous two reports, these findings are encouraging for two reasons. First, the overall range closely mirrors PathNet's target age range of 14-21. Second, and equally important, the large proportion of youth between 16 and 18 corresponds to the age range at which youth are most likely to drop out given that compulsory school attendance ends at age 16

(at least, this is what research suggests is the trend at this point).[2] See Figure 3 for a breakdown of PathNet youth by age.

Figure 3. PathNet Pilot Youth by Age at Referral (N=211)



Educational History

In addition to basic demographics, we also examined some measures of educational needs among youth in the program. This analysis was particularly important given that the goal of PathNet is to connect youth with educational needs to a pathway that will help them achieve positive educational outcomes. It is extremely valuable to look at these needs as regularly as possible—and particularly critical to do so during the pilot when the program may still be figuring out how best to reach its target population. Looking at educational needs is also critical from an evaluation perspective, as it will allow the program to examine whether participation helped to reduce these needs over time.

As explained in the Year 1 and Year 2 reports, it was difficult to access most traditional measures of educational needs for this analysis (e.g. grades, retention status) because of the protections surrounding educational data in Washington and most other states. The only information PathNet staff was able to access were (1) whether or not youth had previously been classified as special education by the school system; and (2) their pre-program Comprehensive Adult Student Assessment System (CASAS) math and reading scores. CASAS is an adult basic education assessment designed for GED candidates, and CASAS scores indicate the grade level on which a youth is functioning (going all the way through college levels). For example, if a youth has a CASAS score of 10 in reading, it implies that he/she is reading at a 10th grade level.

[2] http://www.ytfg.org/documents/AltPathv.7.7Julyfin_000.pdf

As measured by the indicators that were available to us, our analysis of educational history factors revealed that youth in the first two years of PathNet have high levels of educational needs, similar to what was found in each individual year. With respect to special education status, we found that a substantial proportion of PathNet youth in Years 1 and 2 (65 out of 176, or 37 percent) were classified as having been part of an IEP at their previous school or having a special education need in the past.[3] This is well above the estimate for Washington State, where, according to the Office of superintendent on Public Education, only 13 percent of youth are classified as having special education needs.[4] While this is a negative finding in the sense that these needs are prevalent, it is encouraging in that it suggests PathNet is serving the youth it was designed to serve—those with limited academic ability who have not been able to access services through traditional channels.

With respect to CASAS scores, in turn, we found that both reading and math levels were substantially lower than what we would expect given the age range of youth served by the program, and standardized testing scores for school-age youth in Washington State as a whole. As shown in Figure 4, among those for whom CASAS reading levels were available during the first two years of the program (17 percent were missing information on this data element), youth ranged from grade 5 to grade 12, with the majority of young people having a reading level between 7th and 10th grade. Given that the average age of youth in the program was 17 years (with the majority of youth falling between the ages of 16 and 18) these reading levels are significantly lower than what we would expect (at 17, a youth who is on track in school would be in 11th or 12th grade).

To explore this further, we conducted a second analysis of CASAS scores by age at enrollment to PathNet, and found that indeed, most youth in the program during the pilot phase for whom the information was available—eighty-one percent—were reading below the grade level that corresponds to their age.[5] When we broke down reading scores by age, in turn, we found that below-grade reading levels were more prevalent among older youth in the program. Specifically, 42 percent (or 5) of the 15-year-old program participants and 62 percent (or 24) of the 16-year-olds were reading at least one year below grade level compared to 89 percent (or 66) of 17-year-olds and 94 percent (or 33) of 18-year-olds. Figure 5 presents a more detailed breakdown of these numbers—the black line through each age level represents the cutoff between those who are reading at or above grade level (on the right) and those who are reading below (on the left). It should be noted that when we looked at Year 1 and Year 2 youth separately, the percentages were very similar across years—81 percent of Year 1 youth were reading below grade level compared to 83 percent in Year 2. It is also worth noting that according to the Office of Superintendent of Public Education (OSPI), eight-one percent of all 10th graders met the standards on the State assessment tests in the 2009-2010 academic year. When we compare this to the 19 percent of PathNet pilot phase youth for whom this is true, it suggests that PathNet youth in general, had reading skills lower than the average levels for Washington State.

[3] Data was missing on 35 (or 17 percent) of youth.
[4] http://reportcard.ospi.k12.wa.us/summary.aspx?year=2011-12
[5] Age-grade level correspondence was measured as follows: 18year olds (grade 12); 17 year olds (grade 11); 16 year olds (grade 10); 15 year olds (grade 9); and 14 year olds (grade 8).

Figure 4. PathNet Pilot Youth by CASAS Reading Level (N=176)

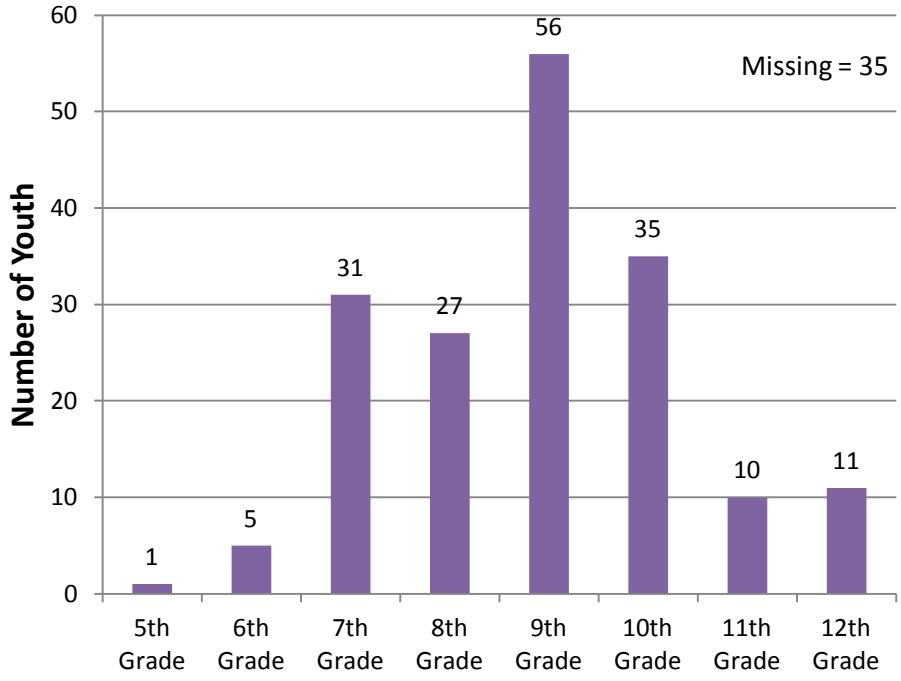
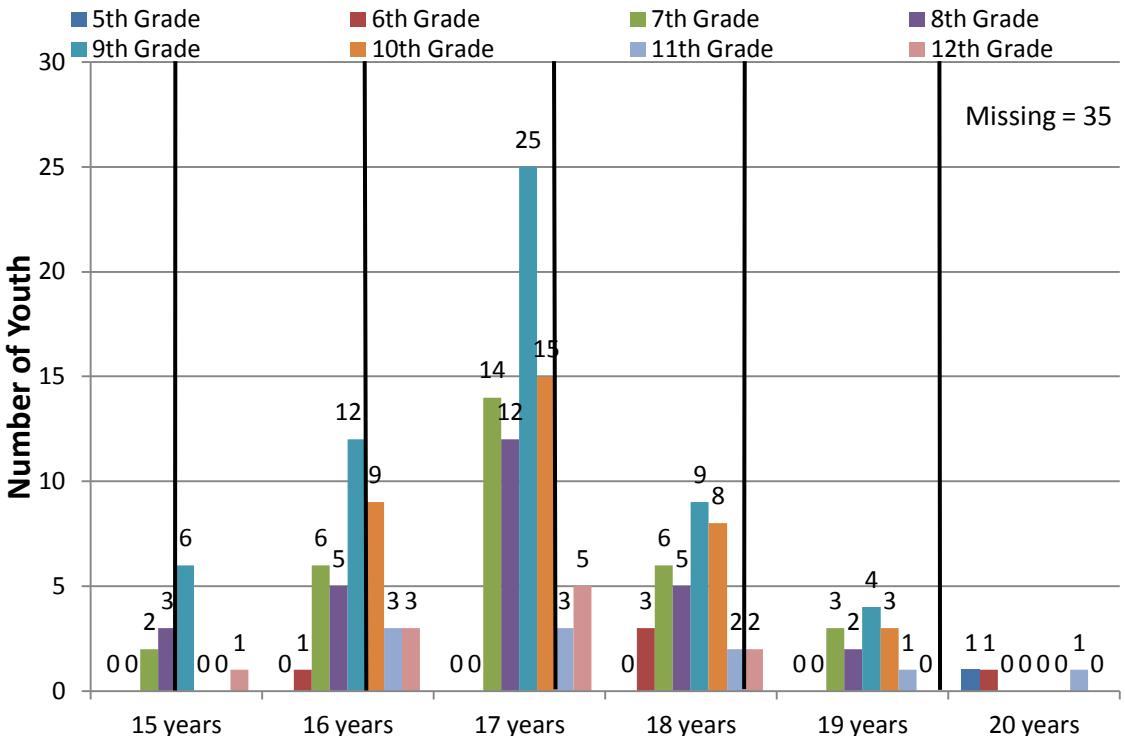


Figure 5. PathNet Pilot Youth CASAS Reading Scores by Age Level (N=176)



Similar to reading levels, baseline math levels among PathNet youth were also substantially lower than what might be expected of youth at a given age. Figure 6 presents the overall breakdown of math levels among these youth, and as shown, the majority of those for whom information was available (18 percent were missing scores) were functioning between a 7th and 9th grade level. Additionally, when we looked at math level relative to age (and grade level that would correspond to that age for a youth on track), we found that 91 percent of PathNet youth (157 of the group) were performing at a math ability below grade level. Figure 7 breaks this percentage down by age, and when we look at it this way we see that, similar to reading levels, the gap exists at all ages but is most striking among the oldest youth in the sample—compared to the 75 percent (or nine) of the 15-year-olds and 79 percent (or 30) of 16- year-olds below their grade level, ninety-three percent (or 68) of 17-year-olds and 100 percent (or 34) of 18-year-olds fell into this category. As with the reading levels, the percentage of youth who were below grade level in math was similar in both years of the pilot phase. In fact, it was exactly the same for math levels, with 91 percent of youth in each year performing below grade level.

Also similar to reading levels, the percentage of youth below grade level math is much higher than the percentage of youth across the state as a whole. According to state-level statistics published by OSPI—forty-two percent of 10th grade youth met the standards on the state assessment tests in the 2009-2010 academic year (compared to the nine percent of PathNet youth who scored at or above grade level on the math CASAS).

Figure 6. PathNet Pilot Youth by CASAS Math Level (N=173)

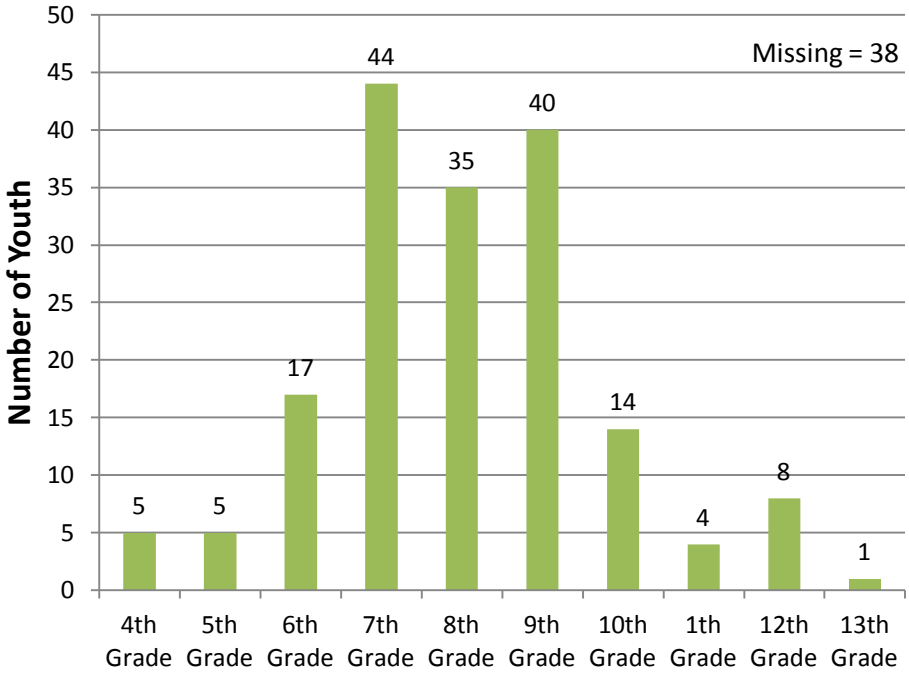
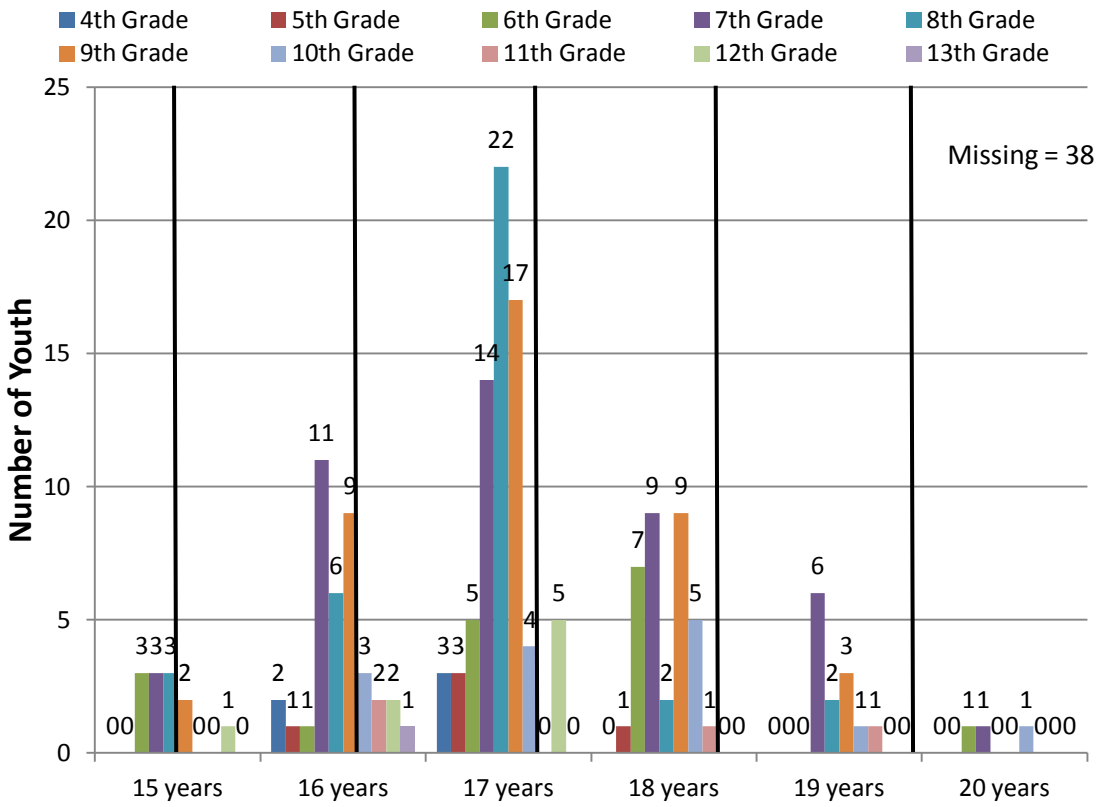


Figure 7. PathNet Pilot Youth CASAS Math Scores by Age Level (N=173)



Risk/Needs Factors

Finally, as part of our analysis of characteristics for PathNet youth in Years 1 and 2, we examined the prevalence of various risk and needs factors. Similar to the educational history analysis, we were limited to examining those factors that could be obtained from the PathNet database and the WSJCA database. That said, PathNet tracks a number of risk/needs factors that are highly relevant for this population—specifically, youth risk level, living status (e.g. homeless, in foster care), and prior involvement with Children's Administration (CA), the child welfare agency in King County, Washington.

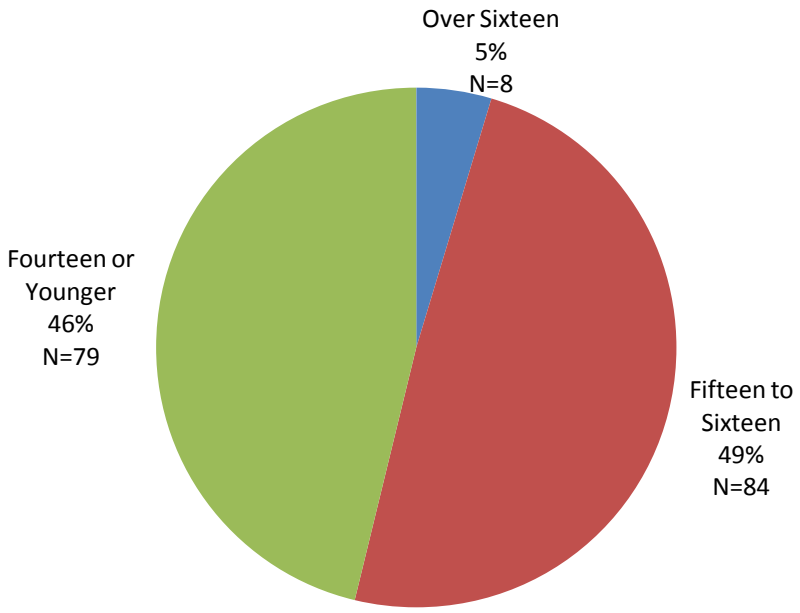
To examine the risk levels of youth in PathNet, we analyzed scores on the Washington State Juvenile Court Assessment (WSJCA). The WSJCA consists of ten domains—criminal history, schools, relationships, use of free time, employment, primary environment in which the youth was raised, current living arrangement, alcohol and drug use, mental health, attitudes and behavior, and skills. Youth are classified as "low," "medium," or "high" risk depending on how many of these risk factors apply to them.

As a whole, youth in PathNet were assessed as being on the higher end of the risk continuum. The majority of the youth (53 percent, or 104 youth) in the first two years of PathNet were classified as high risk, and an additional 30 percent (or 59 youth) were classified as medium risk. Only 17 percent (or 33 youth) were classified as low risk. The proportion of young people in

each risk level remained consistent throughout Years 1 and 2. As stated in the two previous reports, given the value of targeting services toward youth with higher levels of risks and needs, these numbers are not surprising.

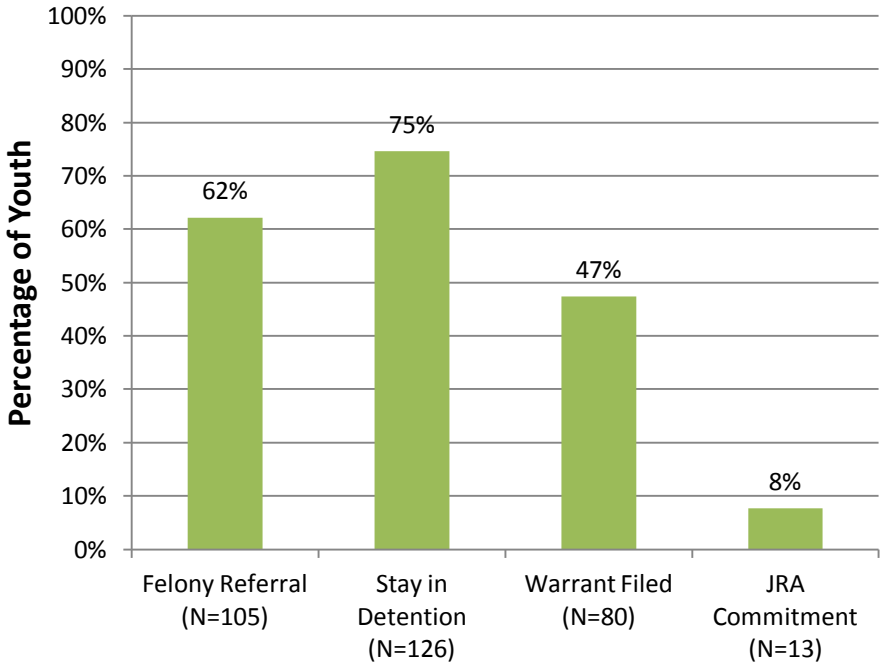
In an effort to highlight the in-depth risks and needs of youth during the PathNet pilot phase, we investigated criminal history items and school suspensions/expulsions. Between Years 1 and 2, there was little difference in the age at first offense. Year 1 was slightly higher in the percent of youth that were referred for a first offense at 14 years of age or younger (50 percent, compared to 43 percent in Year 2). Conversely, Year 2 had slightly more youth referred for a first offense in the 15-16 age range (51 percent, as opposed to 47 percent in Year 1). Youth referred for a first offense at 16 years of age or older consistently accounted for the smallest proportions (three percent and seven percent, respectively). As illustrated in Figure 8, combined, just under half (49 percent) of the 170 young people with available referral history were between the ages of 15 and 16 at first offense, followed by those who were 14 or younger (46 percent), and, finally, youth over 16 (five percent).

Figure 8. PathNet Pilot Youth by Age at First Offense (N=171)



Among those with available data, three-quarters (75 percent or 126) of PathNet youth in the pilot phase had at least one stay in detention, sixty-two percent (or 105) of youth had at least one felony referral, and just under half (47 percent or 80) had at least one warrant filed. See Figure 9 for a complete breakdown of criminal history items.

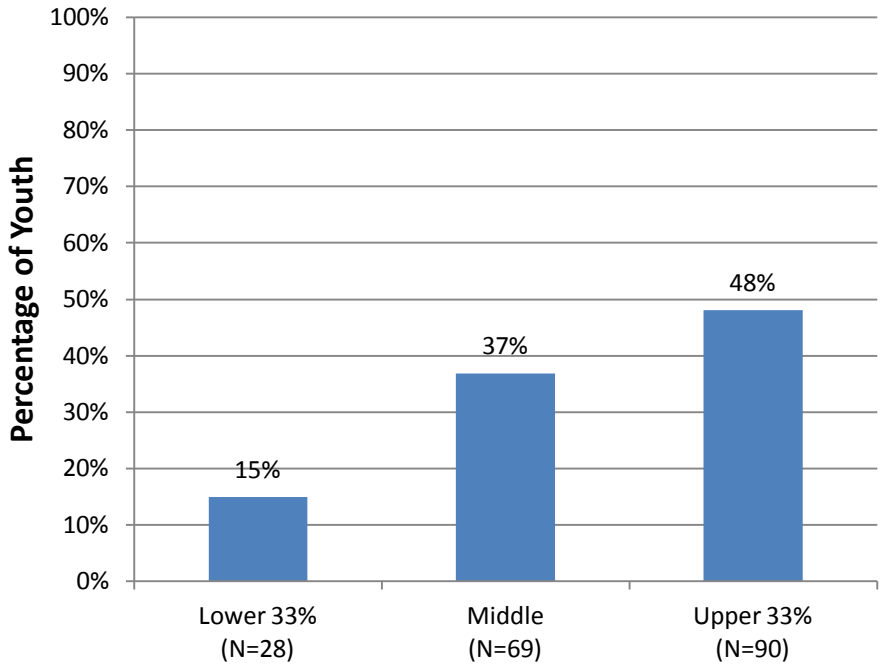
Figure 9. PathNet Pilot Youth by History of At Least One Felony Referral, Stay in Detention, Warrant Filed, or JRA Commitment (N=169)



As for cumulative criminal history scores, we looked at how youth scored on each of the 12 criminal history items appearing on the WSJCA risk and needs assessment. Almost half of all youth who entered PathNet during the pilot phase scored in the upper 33rd percentile, thirty-seven percent scored in the middle range category, and 15 percent scored in the lower 33rd percentile.[6] See Figure 10 for a breakdown of pilot youth criminal history scores.

[6] The Washington Court Juvenile Court Assessment manual defines criminal history score categories as: Lower 33 percent (0-4), Middle (5-7), and Upper 33 percent (8-31).

Figure 10. PathNet Pilot Youth by Cumulative Criminal History Score (N=187)



In addition to being on the higher end of the risk continuum, we also found that a substantial proportion of youth had some history of family problems. Of the 211 youth who entered the program during the pilot phase, sixty-three percent (or 133 youth) were either currently involved, or had past involvement (i.e. a prior substantiated case), with CA. Similar to our finding on risk level, this is not surprising, in that it parallels the rates of child welfare involvement among the broader juvenile justice population in King County. A recent study conducted by the National Center for Juvenile Justice found that approximately two-thirds of youth in the justice system had some form of CA involvement.[7] Given that one of the goals of PathNet is to provide coordinated services to youth, being aware of multi-system involvement is crucial to proper case management.

In addition, while not nearly as prevalent as the risk/needs factors mentioned above, a small but notable percentage of youth that entered the program in the pilot phase had home situations that may be considered unstable. Six percent (or 13 youth) were classified as homeless at the time of enrollment in PathNet, and an additional eight percent (or 16 youth) were classified as living in foster care. While it should not be assumed that foster care is always a negative environment for youth, we mention it here because it has been shown to be associated with negative education outcomes. Specifically, research conducted by the Washington State Institute for Public Policy found that even after statistically controlling for a variety of factors, a youth who enters foster care is likely to have lower test scores and graduation rates, than those who do not touch the foster care system.[8]

[7] Cite NJCC report "Doorways to Delinquency"
[8] http://www.wsipp.wa.gov/rptfiles/FCEDReport.pdf

Finally, one last area of risk and needs investigated was history of school expulsions and suspensions. Among the 170 youth with available data, nearly half (49 percent, or 83) of all youth entering the pilot phase of PathNet had four or more school expulsions/suspensions, followed by a quarter of youth that had between two and three expulsions/suspensions (25 percent, or 42 youth). Youth with no expulsion/suspension history represented 16 percent (or 28) of pilot phase youth. Many youth enrolled in PathNet during the pilot phase were relatively young at the time of their first suspension/explusion—forty-two percent were between 10 and 13 years of age. An additional quarter of youth were between the ages of 14 and 15 at the time of their first expulsion/suspension. There was little difference between Year 1 and Year 2 youth in this area. See the Figures 11 and 12 for a complete breakdown of history of school expulsions/suspensions and age at first expulsion/suspension.

Figure 11. PathNet Pilot Youth by History of School Expulsions and/or Suspensions (N=170)

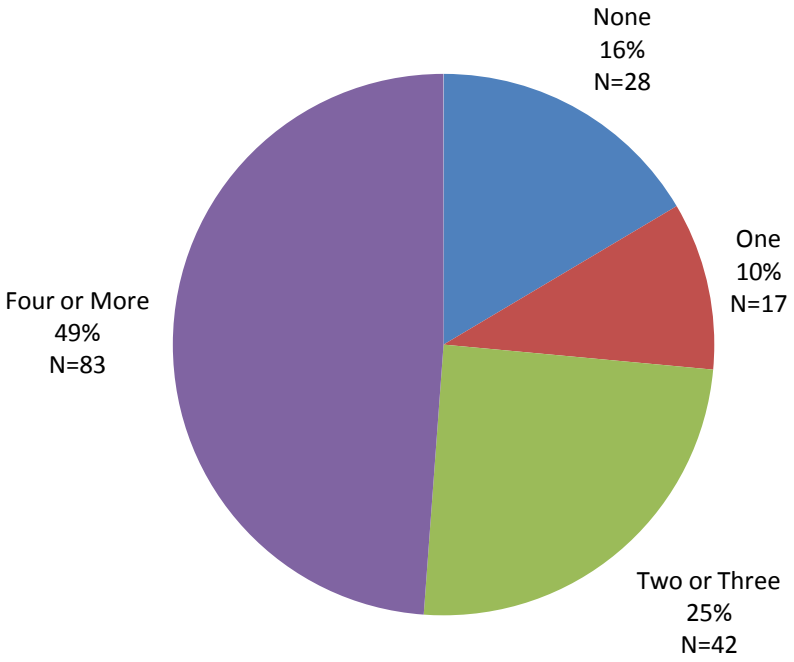
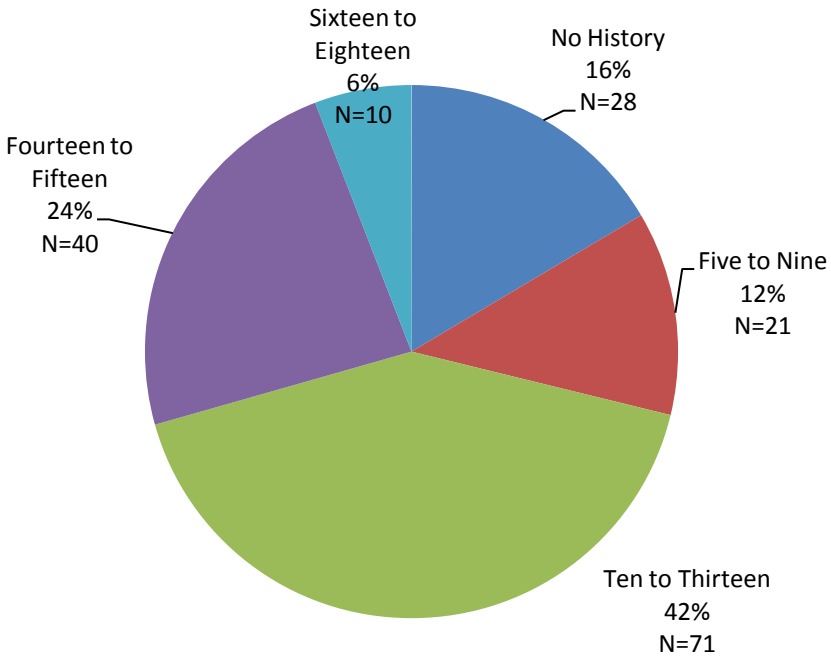


Figure 12. PathNet Pilot Youth by Age at First School Expulsion and/or Suspension (N=170)



Youth characteristics by program track

We also examined differences in youth demographics, educational history, and risk/need factors based on track—in other words, whether youth were re-enrolled in traditional high school, the GED track, or the GED*Plus* track. Examining the differences of these groups is important, as there has been much discussion in the juvenile justice and education field around creating a "secondary educational system" for system-involved youth by funneling them into the GED path. We wanted to explore whether there were certain characteristics that differentiated youth in these groups to better understand why they may be more suited for one than the other. The majority of youth in the PathNet pilot were on either the GED or GED*Plus* track (a cumulative total of 90 percent, with 37 percent in the GED and 53 percent in the GED*Plus* track), and only 10 percent (or 21 youth) were re-enrolled in high school.

In the remainder of this section we present the results of this supplementary analysis, highlighting the main differences we found between youth in the three program tracks. It should be noted, however, that the most striking finding to emerge from this analysis was a relative lack of differences across program tracks in most of the characteristics we examined. Youth tended to be fairly similar in both their demographics and their risk levels (mirroring the trends described above for the complete sample). Given this, we do not discuss those findings here (charts showing the breakdowns of youth in both of these areas are included at Appendix A). Instead, we focus on educational history, the area where we did find some notable differences. These results are presented below.

Educational History

A stated goal of PathNet is to match youth to educational and vocational programs that will help put them on the path to career success. To understand which youth will excel in different types of programs, it is important to examine their educational needs. Additionally, it is important to examine whether youth are being matched appropriately with educational programs that meet their needs, and will help them achieve their goals. As a step toward this, we conducted an analysis to examine the presenting educational needs of youth within each track.

As described above, thirty-four percent of the overall sample for whom special education history data was available (171 youth) had some prior special education history. Our supplementary analysis revealed, however, there were some differences in the prevalence of special education needs between youth in different program tracks. Specifically, special education needs were most prevalent among youth in the high school track (48 percent, or 10 out of 21 youth for whom the information was available). Overall, we determined that the prevalence of special education needs was quite similar in the GED and GED*Plus* tracks (27 percent and 23 percent, respectively).

To explore this in a different way, we also looked at the percentage of special education youth that entered each of the three tracks (as opposed to the percentage of each track with special education needs youth). Among the 57 youth with special education needs, we found that 18 percent (or 10 youth) were enrolled in high school, 37 percent (or 21 youth) were enrolled in the GED track, and 46 percent (or 26 youth) were enrolled in the GED*Plus* track. Though not fully extensive and more nuanced, the combined Year 1 and Year 2 data seem to suggest two things: (1) having a history of special education does not seem to preclude youth from re-enrolling in traditional high school (in fact, these youth were more prevalent among the high school group than either GED group) and (2) the straight GED track seems, overall, to draw more special education youth than the GED*Plus* program (Year 2 findings were contrary to the findings in the Year 1 report in which the GED*Plus* track drew more special education youth).

Our supplementary analysis also revealed some differences in the CASAS levels of youth in the program. Specifically, both reading and math levels were higher among youth in the GED*Plus* and high school tracks than the straight GED, though findings should be interpreted with caution for two reasons. First, the number of youth in the high school track was very small (21 total), and only 57 percent of them (12 out of 21) had available CASAS level data; therefore, it is difficult to know if the trends among these youth are consistent with those we would find among high school track youth more generally. Second, and related, we were missing CASAS scores from a number of youth in the GED track (out of a total of 78 youth in the GED track, fifty-nine had available reading level data and 57 had math level data).

Keeping those caveats in mind, our analysis of CASAS scores revealed that 69 percent of youth in the GED*Plus* track and 67 percent of youth in the high school track were reading at a high school level—grades 9 to 12—while this was true of only 54 percent of youth in the GED track.[9] The pattern was even more pronounced among youth with respect to their math levels. Forty-six percent of youth in the GED*Plus* track and 54 percent of youth in the high school track were

[9] CASAS reading scores were missing for 35 youth in the program (19 GED youth, 7 GED*Plus* youth, and 9 high school youth).

functioning at a high school math level; the corresponding percentage was only 26 percent among youth in the GED track. Overall, these results suggest that youth in the GED*Plus* and high school tracks had stronger reading and math skills as compared to those in the straight GED track. Trends for youth in Years 1 and 2, however, differed a bit from the overall trend. For Year 2 youth, youth in GED*Plus* and high school tracks had stronger reading and math skills. In Year 1, on the other hand, youth had no noticeable differences in reading skills between all three tracks, but youth in the GED*Plus* track had higher math scores as indicated by CASAS scores.

Section II: Preliminary Youth Outcomes

Finally, we looked at preliminary outcomes among those youth who went through the program during its pilot years. Specifically, we looked at two sets of outcomes most relevant to the goals of the program—those related to educational and vocational achievement, and those related to further involvement in the juvenile justice system (again, we expanded the list of juvenile justice measures during the second year of the pilot). It is worth emphasizing one more time that the analysis we conducted was not an outcome evaluation designed to assess the causal impact of the program on youth achievements and recidivism. While the more comprehensive set of recidivism measures brings us one step closer to such an evaluation, it is still much too early in the existence of the program to conduct such an evaluation. A more extensive evaluation would require a comparison group and more rigorous statistical techniques that control for other factors known to play a role in recidivism apart from program participation.

Additionally, because pilot phase youth enrolled into PathNet on a rolling basis, there were a significant number of youth that did not have enough time out of the program for a truly rigorous analysis of the more long-term effects of PathNet. Because youth were admitted to PathNet throughout the first and second year of operation, youth enrolling earlier in PathNet, in Year 1, for example, would have the most available information on any re-referrals to the Prosecutor's office, given that recidivism data is measured from the time of enrollment to September 30, 2012. However, with the expanded measure of recidivism, we were then able to analyze youth recidivism with a uniform six month and 12 month follow-up period. Though not without limitations, our findings from this analysis are valuable in that they shed light on how youth are faring while in the program and may thus lend insight into how PathNet leaders may want to further target resources and programming activities.

In the remainder of this section we present our findings in each of the two outcome categories, beginning with educational and vocational outcomes.

Educational and Vocational Outcomes

Primary among the goals of PathNet is to connect youth to services that will help them achieve positive educational and vocational outcomes. At a minimum, the program aims to have all youth achieve some level of secondary education. Here we examine a number of outcomes related to this goal for youth that entered PathNet during the pilot phase, including the following:

- Progress toward a GED
- Attainment of a GED

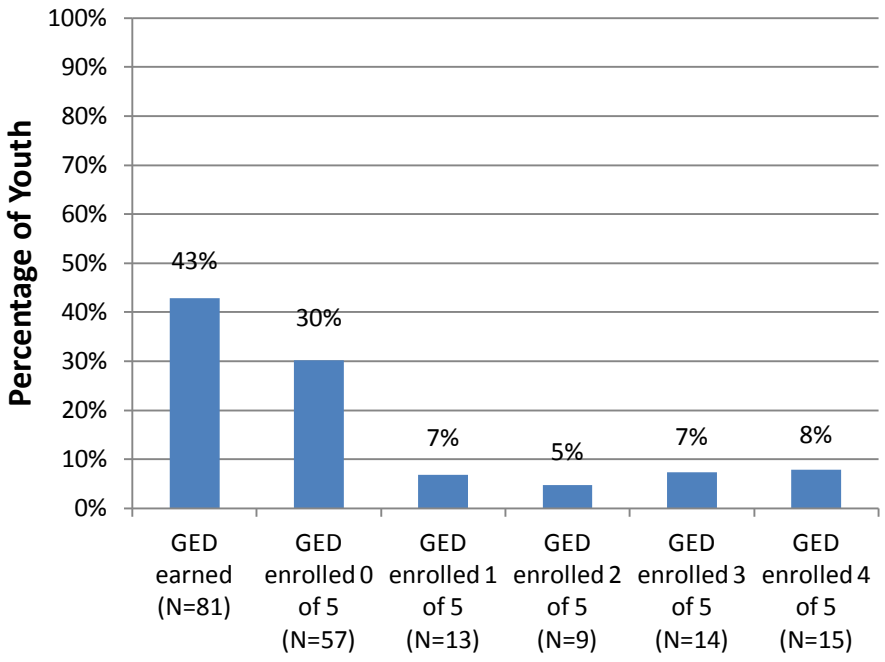
- Enrollment in higher education
- Enrollment in a vocational program
- Employment

Below we present the results of our analysis, breaking them down into two sections that take into account the differences in achievement that are expected for youth in the various program tracks. In the first section, we look at progress toward obtaining a GED, which is relevant to both youth that are in the GED track and those in the GED*Plus* track. In the second section, in turn, we focus on outcomes that are relevant only to youth in the GED*Plus* track—specifically, additional vocational/educational components in which they enrolled in addition to or after completing a GED (the last three outcomes listed above). Note that we do not present any outcomes for youth that selected the third program track—re-enrollment in traditional high school (10 percent of the total sample). This is because there were no outcomes to measure for this group other than re-enrollment itself.

GED achievement level

Broadly, the majority of youth that entered PathNet in the GED or GED*Plus* track during the pilot phase made at least some significant progress toward a degree while in the program. As shown in Figure 13, forty-three percent (or 81) of youth in these two tracks earned a GED during the pilot years, and an additional 15 percent (or 29 youth) passed more than half of the five tests by this time. These numbers remained relatively consistent throughout Years 1 and 2, with 47 percent and 45 percent earning a GED in each year, respectively. Although there is no timeframe within which one is expected to obtain a GED, this high rate of achievement is promising given that these are high-needs youth that have not traditionally excelled in the educational arena.

Figure 13. PathNet Pilot Year Youth GED achievement level (N=189)



We also found that a significant proportion of the group—30 percent (or 57 youth)—did not pass any tests during their time in the program; further analysis revealed, however, that there may be two explanations for this trend that are unrelated to the program's impact on youth, one having to do with time in the program, and one having to do with baseline needs. With respect to the first explanation, we found that 33 percent of the youth who did not pass any tests started the program either after March 2011 or March 2012, which is only a few months shy of the end of the first or second school year (when the study periods ended) and thus their lack of progress may reflect the fact that they did not have enough time in the GED track to prepare for any of the tests within the pilot time period.[10] Additionally, when we explored the amount of time youth who had achieved different levels spent in the program, we found that, overall, those who had passed at least three of the five GED exams spent more time in the program than those who passed two or fewer. Youth who passed at least three exams averaged 252 days in the program, whereas youth who passed at most two exams only averaged 186 days in PathNet. This suggests that time in program may have been a factor in some youth's progress as well.

With respect to the second explanation, in turn, we found that when we compare those same two groups of youth (those who passed two or fewer exams and those who passed three or more), youth in the first group had lower CASAS scores (both reading and math) compared to youth in the second. Specifically, only 50 percent of youth who passed two or fewer exams were reading at a high school level (9^{th} to 12^{th}), compared to 72 percent of those who passed at least three of the five GED exams; and only 12 percent of those who passed at most two exams scored in the high school range on the math CASAS compared to 54 percent of youth who passed at least three exams. While the difference was more pronounced on the math tests, both sets of findings suggest that youth who did not progress as far in the GED tests were higher needs and thus may have needed more time than the average youth in the program to progress through the tests.

GEDPlus achievement level

As stated above, PathNet aims not just to help youth achieve a high school diploma or a GED, but also to further engage them in educational and vocational activities through the GED*Plus* program. The GED*Plus* program consists of three components in which youth can participate—post-secondary education, job/vocational training, and employment. While youth can only enroll in post-secondary education once they have graduated from high school or earned a GED, they may start either of the other two components while enrolled in a GED program, and can participate in multiple components at the same time if they so choose. In this section we examine the types and combinations of activities in which GED*Plus* youth participated during PathNet's pilot phase.[11]

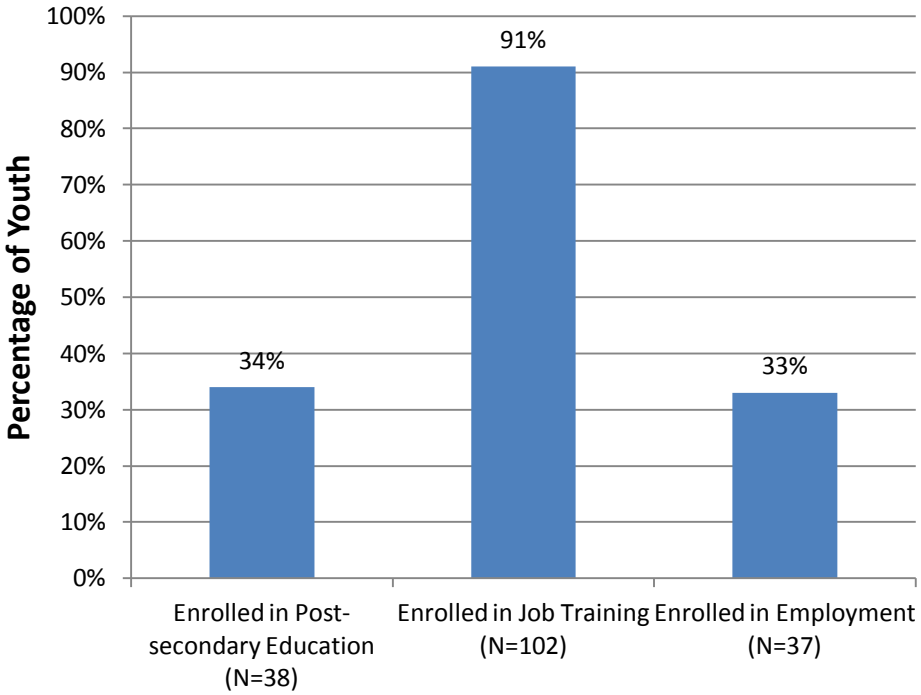
Of the 112 youth in the GED*Plus* track, all of whom were enrolled in at least one *Plus* component, fifty-three percent (or 59 youth) were enrolled in one GED*Plus* component, and 48 percent (or 53 youth) were enrolled in two at the same time. With respect to the specific components that were most often sought out, we found that job training was by far the most

[10] The data for this analysis were collected in June 2011 and June 2012 for Years 1 and 2, respectively.

[11] GED*Plus* youth include anyone in the program who is enrolled in at least one component of the GED*Plus* program. In this sense, GED*Plus* is both a status and an outcome. We have chosen to discuss participation in GED*Plus* activities as an outcome here because the level of involvement can be considered an achievement in and of itself.

popular. As shown in Figure 14, ninety-one percent were enrolled in some type of job training. Substantial proportions of youth pursued post-secondary education and full time employment as well though. Thirty-four percent of the GED*Plus* youth (or 38 youth) were enrolled in a post-secondary education program, and 33 percent (37 youth) were employed full-time.[12] Of those youth who were enrolled in two components, the large majority (36 of 53 youth, or 68 percent) combined post-secondary education and job training; the remaining youth enrolled in job training and employment (21 youth), and post-secondary education and employment (six youth), respectively.[13]

Figure 14. GED*Plus* involvement for youth who earned a GED in PathNet Pilot (N=112)



Justice System Involvement Outcomes

Finally, given that the PathNet pilot phase specifically targets youth who are involved in the juvenile justice system, we also examined preliminary outcomes related to further involvement in this system. As mentioned above, these outcomes should only be considered preliminary, for a number of reasons—the first of which is that they were measured from the time youth entered PathNet, which may be too early to reflect the true impact of the networked services a young person receives. Additionally, because of data availability and the fact that youth enrolled in PathNet on a rolling basis throughout each of the pilot years, July 2010 to May 2011 and July 2011 to May 2012, we were unable to track recidivism for individual youth for what is considered to be best practice—two years-post program.

[12] Percentages add up to greater than 100 as some youth were engaged in multiple activities.
[13] PathNet youth in the GED and high school tracks were left out of this section because their numbers were minimal. This section focused only on the GED*Plus* youth to provide a clearer picture of achievement levels.

In the Year 1 and Year 2 reports, due to certain data limitations, we tracked recidivism from the day of PathNet enrollment to a few months after the end of PathNet programming (May 2011 and September 2012, respectively). Thus, the Year 1 and Year 2 reports may have undercounted a more accurate re-referral rate given that some youth were only in PathNet for a few months before the end of the recidivism follow-up period (May 2011 and 2012).

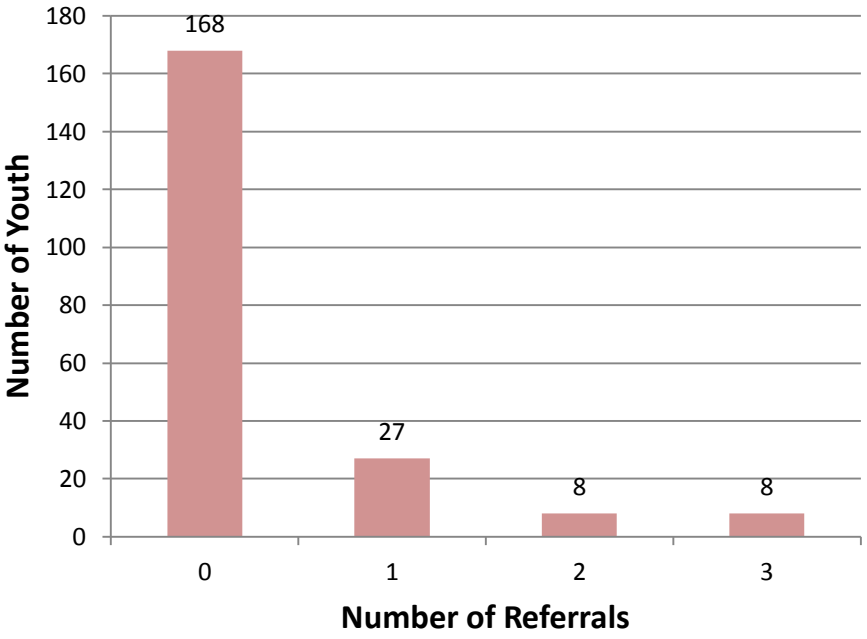
In the current, combined analysis, however, we were able to examine the data using a six month follow-up period and a 12 month follow-up period from each youth's referral to PathNet to ensure that any re-referrals to the Prosecutor's office would come from youth with equal opportunity to offend. Using these standardized follow-up periods allows for more sound results and more equitable comparisons between the two years of the pilot.[14] As stated in the Year 1 and 2 reports, the recidivism numbers presented below are based on the number of cases re-referred to the prosecutor's office, regardless of whether the cases were later dismissed.

Six Month Follow-Up

In the combined analysis, twenty percent (or 43 youth) had a new referral to the Prosecutor's office within six months of their enrollment. The majority of those referred were only referred once. As shown in Figure 15, among those who were referred at least once, sixty-three percent (or 27 youth) had one new referral, nineteen percent (or eight youth) had two new referrals, and 19 percent (or eight youth) had three referrals. Our findings also revealed that young people in the pilot phase, on average, were re-referred to the Prosecutor's office in approximately 69 days. The pilot phase average reflected a wide range of times across youth, with the shortest time at two days and the longest at 180 days.

[14] The recidivism analysis in the Year 1 report was conducted by AOC. It should be noted in analyzing and combining recidivism for Year 1 and Year 2 youth, we found a higher recidivism rate for Year 1 youth than what was indicated in the Year 1 report. The analysis in this combined report compares the two years in a standardized manner given the uniform follow-up periods per youth, however, the analysis indicate that recidivism in the Year 1 report may potentially reflect an undercount.

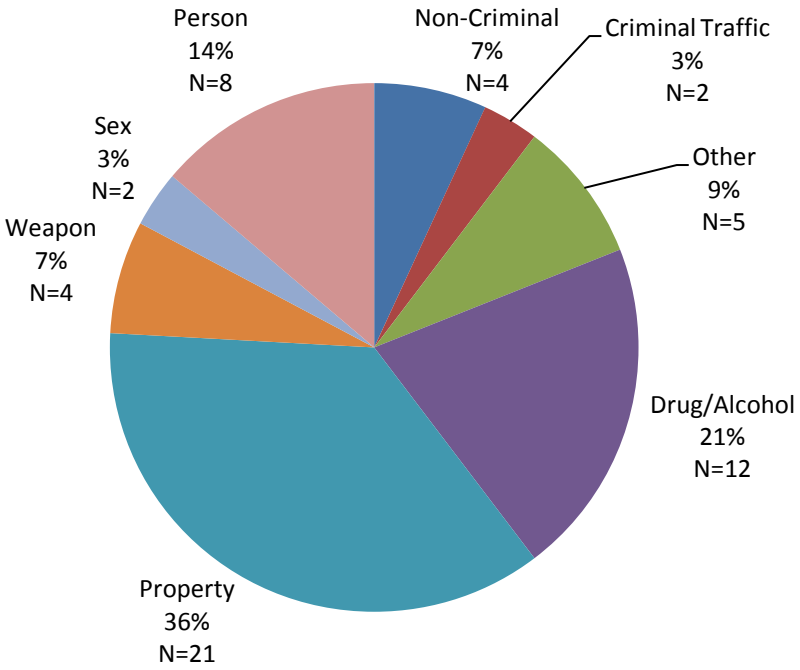
Figure 15. PathNet Pilot Youth by Number of Re-referrals – Six Month Follow-Up (N=211)



In the analysis we also examined the most severe offenses among PathNet youth who were re-referred after PathNet enrollment to get a sense of how serious (or minor) the re-offending was. Arguably, new referrals for relatively minor offenses such as possession of small amounts of marijuana are of less concern than those for more serious offenses such as first degree robbery—at least from a programmatic perspective.

When examining recidivism events by charge category, using the most serious charge associated with each event for the analysis, we found that the most common offenses are classified as property offenses (36 percent). The data suggests that property offenses accounted for the most serious offense category at re-referral. Drug/alcohol offenses and person (violent) followed at 21 percent and 14 percent, respectively. See Figure 16 for a breakdown of the most serious offense at referral by offense category in PathNet pilot phase youth.

Figure 16. PathNet Pilot Youth by Most Serious Offense Category at Re-Referral – Six Month Follow-Up (N=58)



The majority of pilot phase youth (60 percent) were re-referred for misdemeanor or gross misdemeanors (the difference between the two being that a gross misdemeanor is associated with longer jail sentences—up to one year compared to 90 days for a misdemeanor—and larger fines—up to five thousand dollars). Felony offenses comprised 29 percent, non-criminal offenses comprised seven percent, and criminal traffic offenses were four percent of re-referred youth. As shown in Figure 17 the most common offense types were assault in the fourth degree and theft in the third degree. See Appendix B for a complete breakdown of most serious offense types at referral.

With respect to recidivism, we also looked further into the system to see if cases were petitioned, and for those that were, if those cases were dismissed or adjudicated. We found that, among all new referrals to the Prosecutor's office, twenty-three percent were dismissed, sixty-five percent were found guilty, and the remaining 12 percent of referrals were currently active in court processing and had not yet reflected a court result.

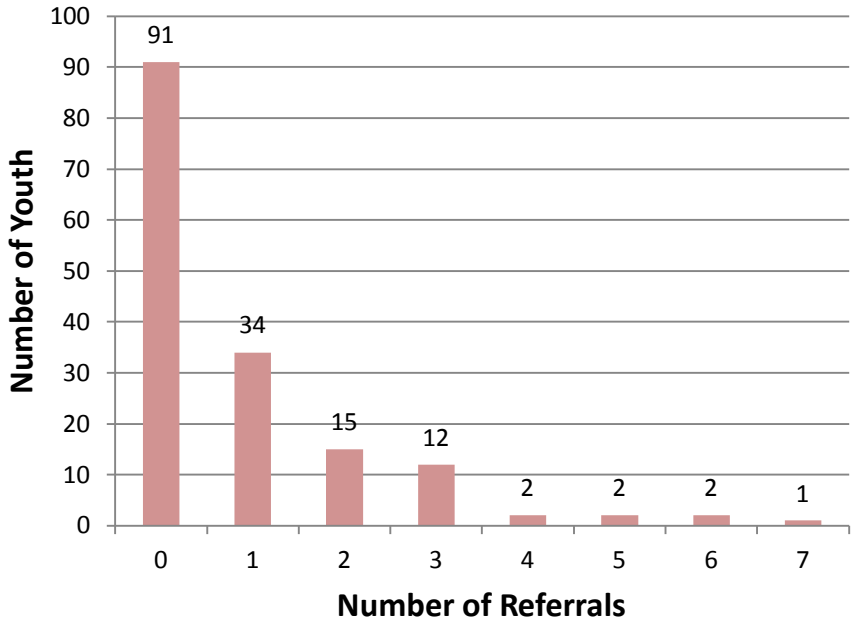
Twelve Month Follow-Up

The final piece of our combined analysis of Year 1 and Year 2 pilot phase youth centered on a 12-month follow-up analysis of recidivism. There were 211 youth throughout the course of the PathNet pilot phase, but only 159 had 12-months of follow-up (youth entering into PathNet in Year 2 during the months of November 2011 through May 2012 did not have 12 months worth

of tracked recidivism).[15] These youth were excluded from this analysis. Two reminders: (1) this standardized way of measuring recidivism across the full two years of the pilot is somewhat different from the recidivism measures shown separately in the Year 1 and Year 2 reports, and (2) the figures presented below are based on the number of cases re-referred for petition. Additionally, because we had to exclude 52 youth from our 12-month recidivism analysis, our findings may be undercounting the true number of re-referrals.

At 12 months a far greater percentage of youth in the pilot phase had a new referral (43 percent, or 68 youth) to the Prosecutor's office after their enrollment into PathNet compared to the six month follow-up group (20 percent). This is consistent with numerous research studies that find time in the community to be an important factor when examining and explaining recidivism rates. Among those who had a new referral, the majority (50 percent, or 34 youth) had only one referral. Twenty-two percent had two new referrals, eighteen percent had three new referrals, and three percent had four new referrals. See Figure 17 for a complete breakdown of re-referrals. In addition, we also found that, on average, it took pilot phase youth 125 days, roughly four months, to reach their first re-referral. As stated in previous analyses, this average reflected a wide range of times across youth, with the shortest time at 1 day and the longest at 325 days (nearly double the time for the longest day under the six month analysis).

Figure 17. PathNet Pilot Phase Youth by Number of Re-referrals – 12 Month Follow-Up (N=68)

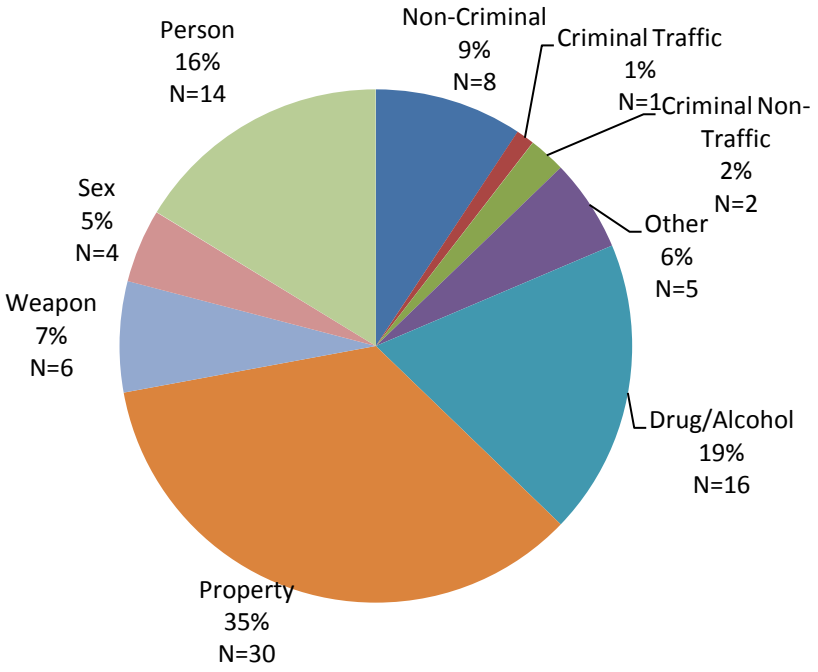


Once again, when examining recidivism events by charge category, using the most serious charge associated with each event for the analysis, we found that the most common offenses

[15] The AOC provided recidivism data for each youth entering PathNet from the day of enrollment to September 30, 2012. Year 1 youth and Year 2 youth who were enrolled before November 2011 had sufficient tracked recidivism for a 12 month follow-up.

were classified as property offenses (35 percent). Drug/alcohol offenses and person (violent) offenses followed at 19 percent and 16 percent, respectively. See below for a full breakdown of most severe offense categories at re-referral (12 month follow-up).

Figure 18. PathNet Pilot Phase Youth by Most Severe Offense Category at Re-referral – 12 Month Follow-Up (N=86)



Additionally, the majority (54 percent) of pilot phase youth in this 12 month analysis were re-referred for misdemeanor or gross misdemeanors. Felony offenses rose to 33 percent and the remaining 12 percent were non-criminal, criminal non-traffic, and criminal traffic offenses (in order of greatest to least percentage). The most common offense type was theft in the third degree. (*See* Appendix C for a full breakdown of offense types.)

Finally, we looked further into the system for those youth with a 12 month follow-up period to see if their referred cases were dismissed or adjudicated. We found that, among all young people with a new referral to the Prosecutor's office, thirty percent were dismissed, fifty-nine percent were found guilty, and the remaining 12 percent were currently active in court processing and had not yet reflected a court result.

CONCLUSION

In this report we presented findings on background characteristics and preliminary outcomes among youth who enrolled in the PathNet program during its pilot phase, with the goal of providing King County juvenile justice stakeholders with an overview of who is entering the program and how they are faring. The analysis we conducted was preliminary in a number of ways—most significantly in that the outcome data we examined were short-term and reflect only

youth outcomes that occurred shortly after they were in the program. That said, our findings on both youth characteristics and outcomes are encouraging in several respects. First, it appears as though youth who enrolled in PathNet during its pilot year reflect the high risk, high needs population that the program was designed to target. Youth exhibited particularly high needs in the educational domain, the primary focus of the program. Second, and equally important, preliminary outcomes among pilot phase youth look positive. Forty-three percent of youth in the program obtained a GED. Juvenile justice outcomes look a bit more unclear; 43 percent of youth in PathNet were re-referred to the Prosecutor's office for a new offense after 12 months. These findings are something that the program designers can assess and discuss, to ascertain if they consider it be high or low—in other words, acceptable or not in relation to the program's goals.

As a next step in learning more about the program's impact, we recommend that PathNet leaders expand the outcome data they collect—in particular their recidivism data—in a number of ways. Specifically, we recommend that they:

1. Define an appropriate dosage of PathNet programming youth should receive before recidivism is tracked.

2. Begin tracking recidivism data upon PathNet end date as opposed to start date. End date information was not given to us for this analysis and this may have been more accurate in describing how quickly youth were being re-referred and for what types of offenses.

3. Standardize recidivism follow-up periods for various cohorts of youth coming through PathNet in different years. In other words, track all youth six months, one year, and/or two years out.

APPENDIX A:

Demographics and Other Risk and Needs Factors by Program Track

Figure 1. Gender by Program Track (N=211)

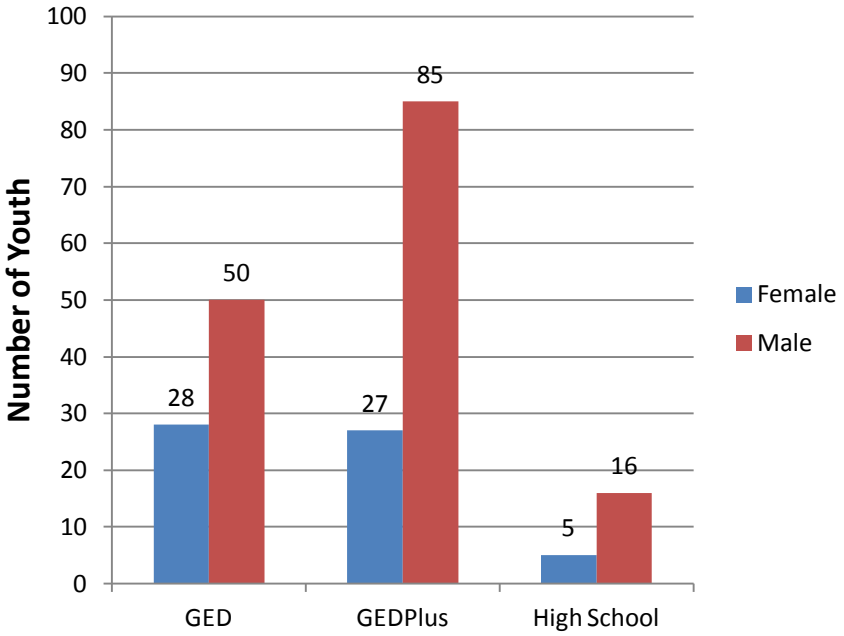


Figure 2. Race by Program Track (N=211)

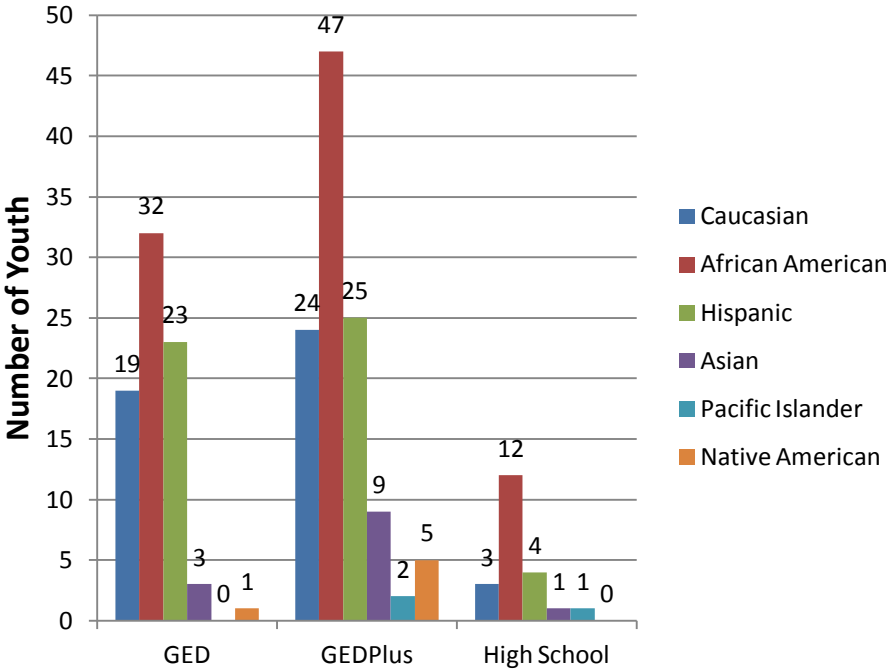


Figure 3. Age by Program Track (N=211)

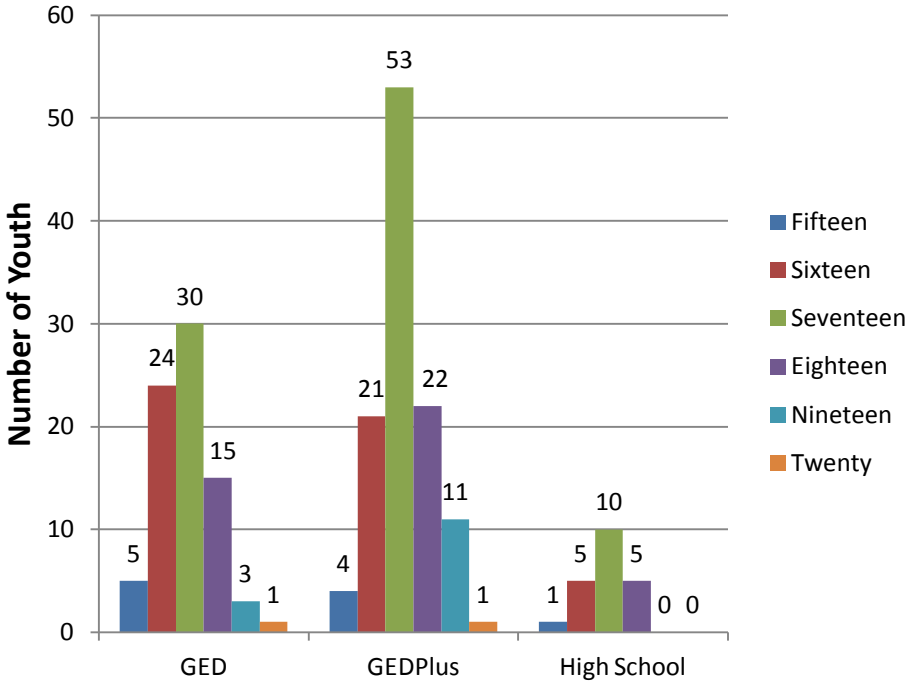


Figure 4. Risk Level by Program Track (N=196)

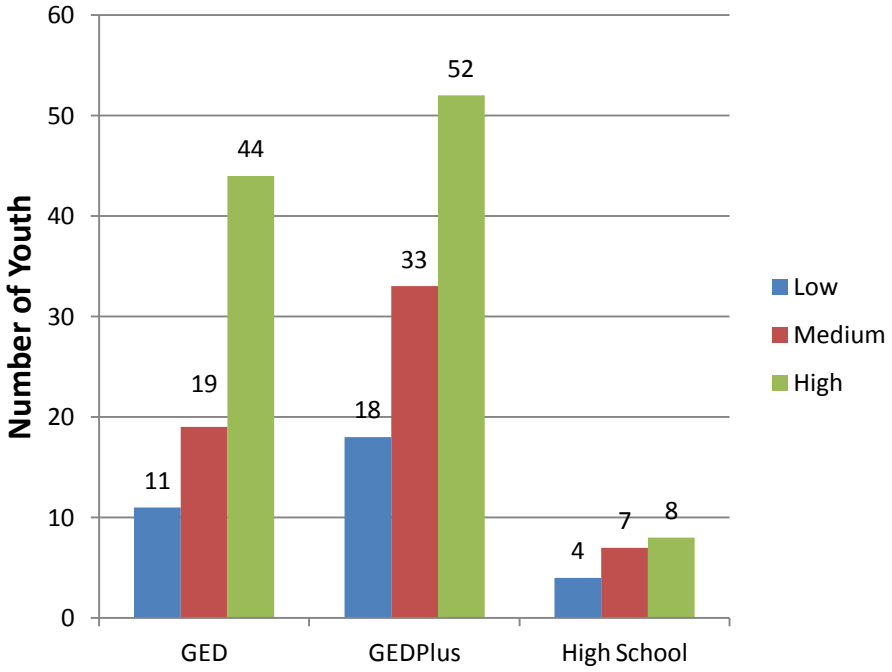


Figure 5. Children Administration Involvement by Program Track (N=211)

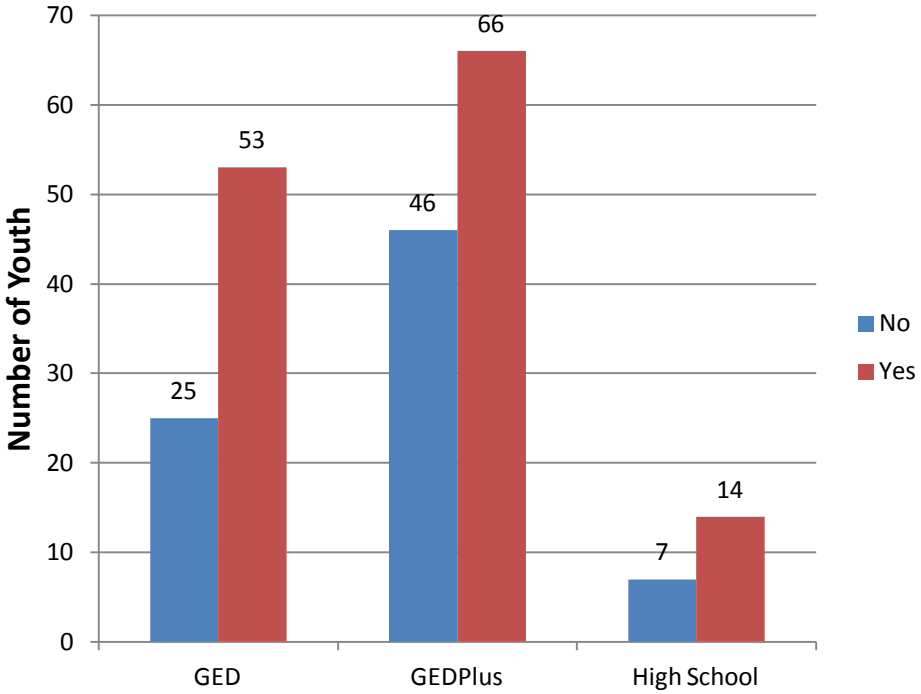
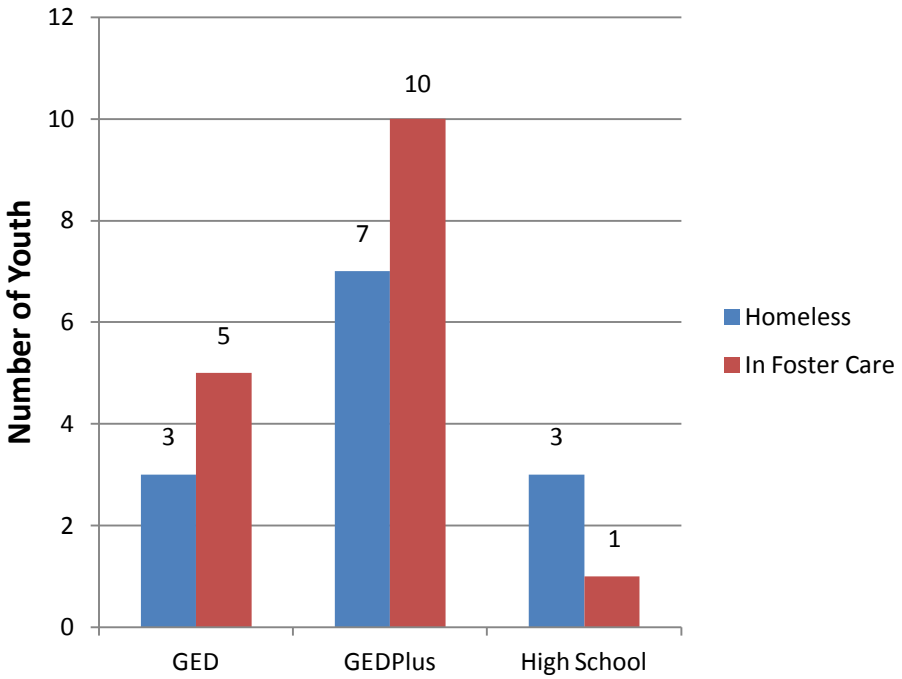
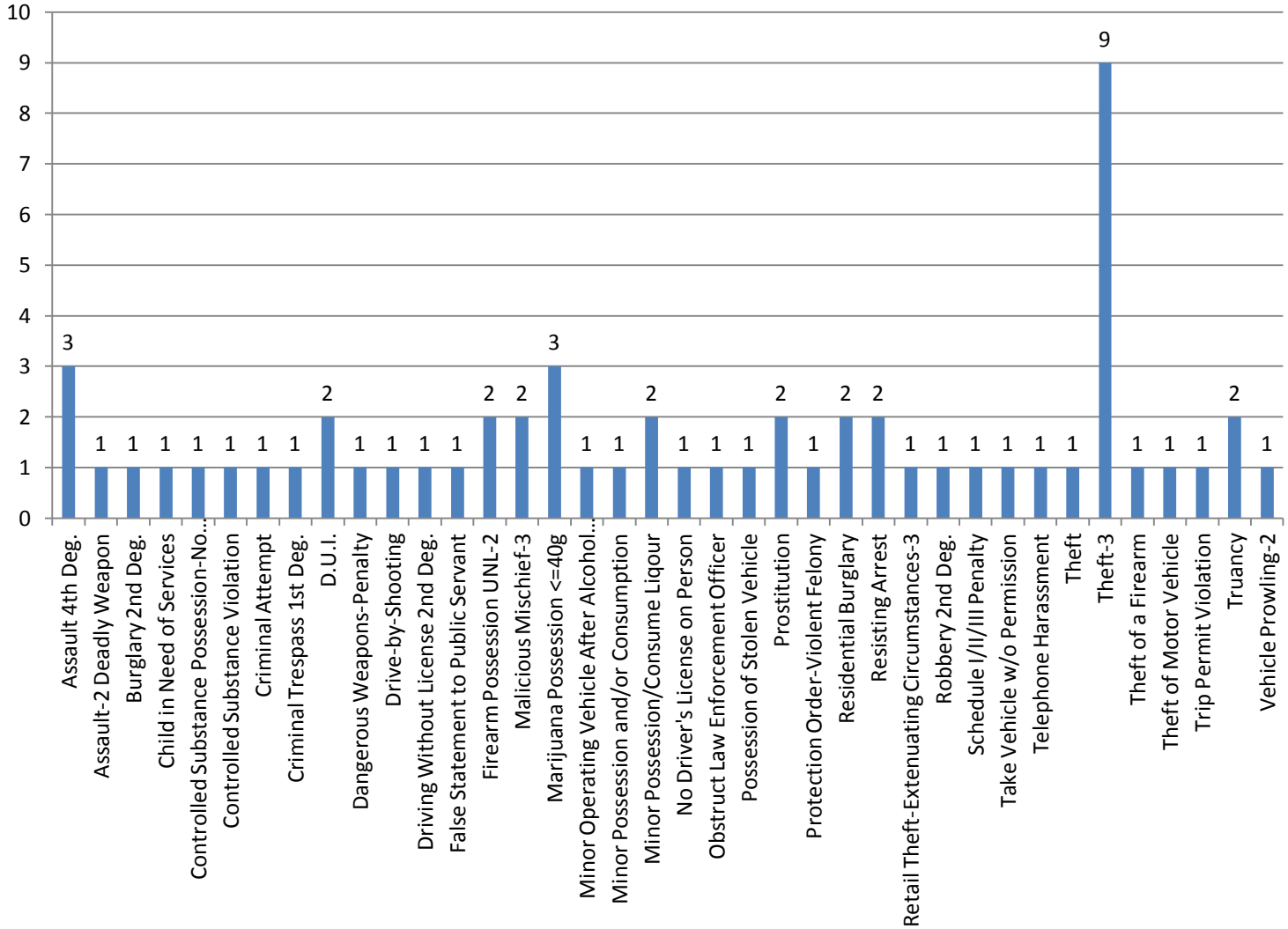


Figure 6. Housing Status by Program Track (N=29)



APPENDIX B:
PathNet Pilot Youth by Most Serious Offense Type at Re-referral – Six Month Follow-Up (N=58)



APPENDIX C:
PathNet Pilot Phase Youth by Most Serious Offense Type at Re-referral – 12 Month Follow-Up (N=87)