

College and Career Readiness School Model Programs in Texas: Exploring Access for All Students

About This Project

In 2023, The American Institutes for Research[®] (AIR[®]) launched a study to evaluate the implementation of College and Career Readiness School Models (CCRSM) in Texas. The study seeks to understand the fidelity of implementation of the CCRSM blueprints for Early College High Schools (ECHS) and Pathways in Technology Early College High Schools (P-TECH) campuses. Through the analysis of extant data as well as the collection and analysis of focus group, and interview data, researchers at AIR learned how campus leaders implemented CCRSM blueprints.

About This Brief

This research brief is part of a series of four focusing on the quantitative analysis of students' access to ECHS and P-TECH programs in Texas. Other briefs in the series cover implementation successes and challenges as perceived by program staff, perspectives of high school students who successfully graduated from ECHS and P-TECH programs, and the performance of select CCRSM programs in meeting Outcome-Based Measures.

Background and Methodology

The Texas College and Career Readiness School Models (CCRSM) are open enrollment programs that blend high school and college coursework to help historically underserved and at-risk students develop technical skills, earn college credentials and degrees, and pursue in-demand career paths. The ECHS and P-TECH Blueprints include expectations for equitable access to these programs, such that students

Key Findings

- Among ECHS programs in operation in 2023–24, 72% met access designation requirements in 2021–22. The percentage of ECHS campuses meeting these requirements was higher among whole-school ECHS programs and programs in suburban and urban areas.
- Among P-TECH programs in operation in 2023–24, 80% met access designation requirements in 2021–22. The percentage of P-TECH campuses meeting these requirements was higher among programs in urban areas.
- ECHS programs in rural areas, and P-TECH programs in suburban areas, were least likely to meet access designation criteria.
- P-TECH programs were more likely than ECHS programs to serve a student population that met or exceeded the districtwide percentage of at-risk or economically disadvantaged students.

participating in the programs closely resemble the population of students in Grades 9–12 in the district. Specifically, according to the Blueprints provided by the Texas Education Agency (TEA):

- the percentage of Grade 9 program participants identified as at-risk students must not be more than 25 percentage points (ECHS programs) or 15 percentage points (P-TECH programs) below the district percentage, and
- the percentage of Grade 9–12 program participants identified as economically disadvantaged students must not be more than 10 percentage points (ECHS programs) or 5 percentage points (P-TECH programs) below the district percentage.

Although designation focuses specifically on equitable access for at-risk and economically disadvantaged students, ECHS and P-TECH programs can now meet designation criteria “with distinction” by also meeting thresholds related to the percentage of program participants who are English learners or students with disabilities. Each year, ECHS and P-TECH programs provide data on student enrollment, achievement, and attainment so that TEA can calculate the Outcomes-Based Measures (OBMs) that it uses to determine programs’ eligibility for designation.

By examining OBM data from the 2021–22 school year, the American Institutes for Research (AIR) has found that many of the ECHS and P-TECH programs operating today are achieving and exceeding expectations surrounding equitable access. In the following sections, we provide detailed information about the extent to which the characteristics of students participating in ECHS and P-TECH programs in operation during the 2023–24 school year were representative of the characteristics of all students in Grades 9–12 in the districts in which these programs are located based on data from the 2021–22 school year. In addition, we provide the number and percentage of ECHS and P-TECH programs in operation during the 2023–24 school year that met access designation criteria based on OBM data from 2021–22 and explore how rates of meeting access designation criteria varied across different levels of urbanization (rural, town, suburban, and urban) and model type (whole school vs. school- within-a-school).

Box 1. How does TEA define “at risk”?

State law defines a student as being at risk^a of dropping out of school if they are under 26 years of age and

- Was not advanced from one grade level to the next for one or more school years;
- If the student is in grade 7, 8, 9, 10, 11, or 12, did not maintain an average equivalent to 70 on a scale of 100 in two or more subjects in the foundation curriculum during a semester in the preceding or current school year or is not maintaining such an average in two or more subjects in the foundation curriculum in the current semester;
- Did not perform satisfactorily on an assessment instrument administered to the student under Subchapter B, Chapter 39, and who has not in the previous or current school year subsequently performed on that instrument or another appropriate instrument at a level equal to at least 110 percent of the level of satisfactory performance on that instrument;

- If the student is in prekindergarten, kindergarten, or grade 1, 2, or 3, did not perform satisfactorily on a readiness test or assessment instrument administered during the current school year;
- Is pregnant or is a parent;
- Has been placed in an alternative education program in accordance with Section 37.006 during the preceding or current school year;
- Has been expelled in accordance with Section 37.007 during the preceding or current school year;
- Is currently on parole, probation, deferred prosecution, or other conditional release;
- Was previously reported through the Public Education Information Management System (PEIMS) to have dropped out of school;
- Is a student of limited English proficiency, as defined by Section 29.052;
- Is in the custody or care of the Department of Family and Protective Services or has, during the current school year, been referred to the department by a school official, officer of the juvenile court, or law enforcement official;
- Is homeless, as defined by 42 U.S.C. Section 11302, and its subsequent amendments;
- Resided in the preceding school year or resides in the current school year in a residential placement facility in the district, including a detention facility, substance abuse treatment facility, emergency shelter, psychiatric hospital, halfway house, cottage home operation, specialized child-care home, or general residential operation.

SB 1746, 86th Texas Legislature, 2019, amended Section 29.081 of the Texas Education Code (TEC) to expand the definition of students who are at risk of dropping out to include students who have been incarcerated or who have parents that have been incarcerated within the student's lifetime, in a penal institution as defined by Penal Code, §1.07.

^a [Education Code Chapter 29. Educational Programs \(texas.gov\)](https://www.texas.gov/legislation/education-code-chapter-29-educational-programs)

In this brief, we examine equitable access to ECHS and P-TECH programs by subtracting the percentage of students in Grades 9–12 within a specific subgroup in the district (e.g., economically disadvantaged students) from the percentage of Grade 9–12 students in that subgroup¹ who are enrolled in the program. Differences less than 0 indicate that the subgroup is underrepresented in the program, and differences greater than 0 indicate that the subgroup is well or overrepresented in the program. Overrepresentation by this definition is positive. Although ECHS and P-TECH programs are permitted to have values less than 0, larger negative values indicate a more severe underrepresentation of historically underserved students within these programs, whereas values greater than 0 allow for the possibility for these programs to close historical gaps in students' postsecondary outcomes. The OBM data also identify which ECHS and P-TECH programs have met access designation criteria (based on the percentage of at-risk and economically disadvantaged students they serve, as we described earlier). These data allow us to examine the percentage of ECHS and P-TECH programs that met access

¹ For the subgroup of students identified as at risk, the percentage of Early College High School (ECHS) and Pathways in Technology Early College High School (P-TECH) participants focuses on Grade 9 students only.

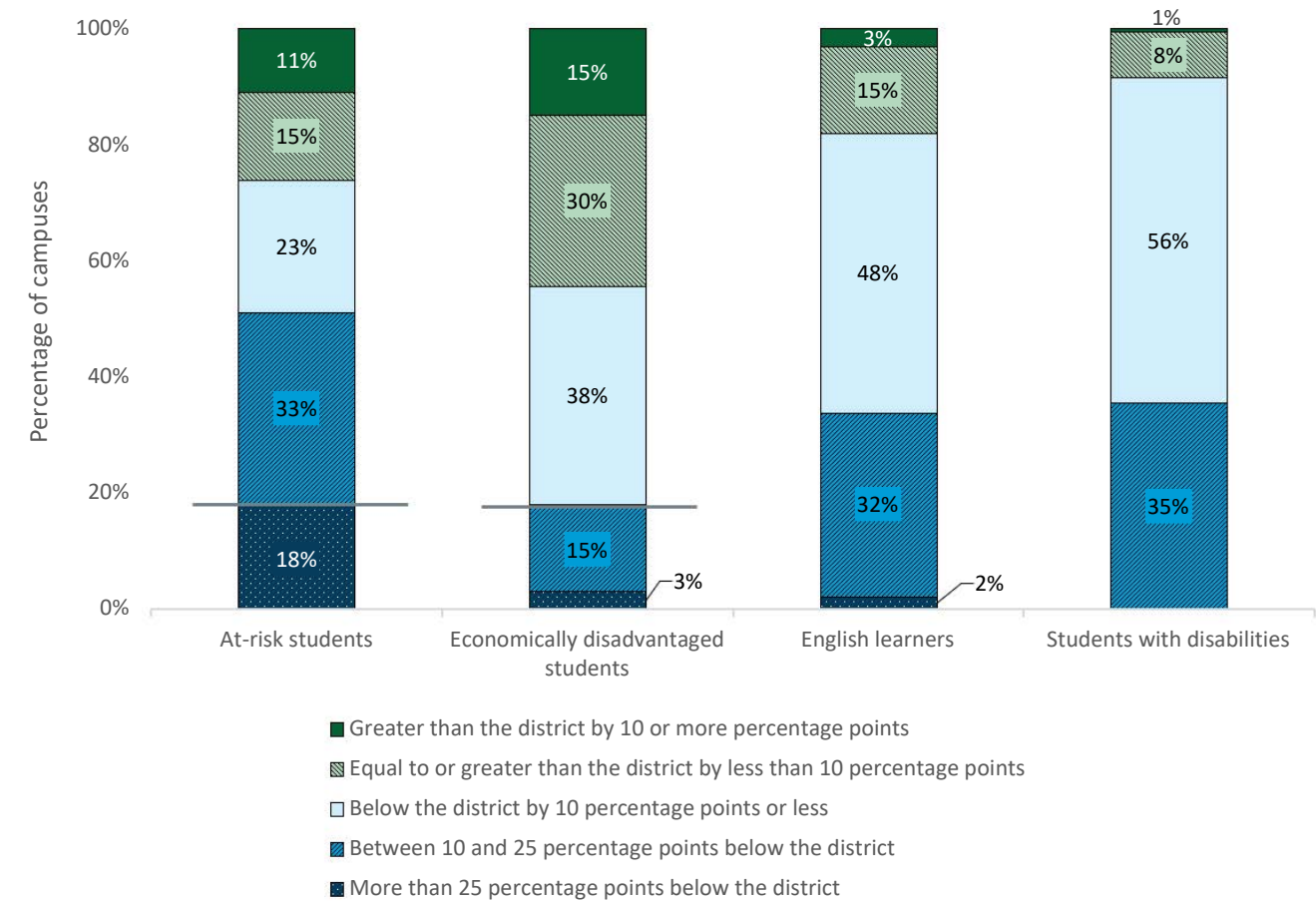
designation criteria in 2021–22 and to explore the extent to which designation rates varied across different levels of urbanization and program model types.

Results

ECHS Programs

Of the 233 ECHS programs in operation in the 2023–24 school year, 189 had OBM data addressing equitable student access in 2021–22 because they had been in operation for at least 3 years. In Exhibit 1, we illustrate the differences between ECHS programs and their districts in the percentage of students in each of the four groups of students identified in the ECHS blueprints who are traditionally underserved in higher education.

Exhibit 1. Comparison of ECHS Campuses and Their Districts on the Percentage of Students Identified as At Risk, Economically Disadvantaged, English Learners, and Students With Disabilities



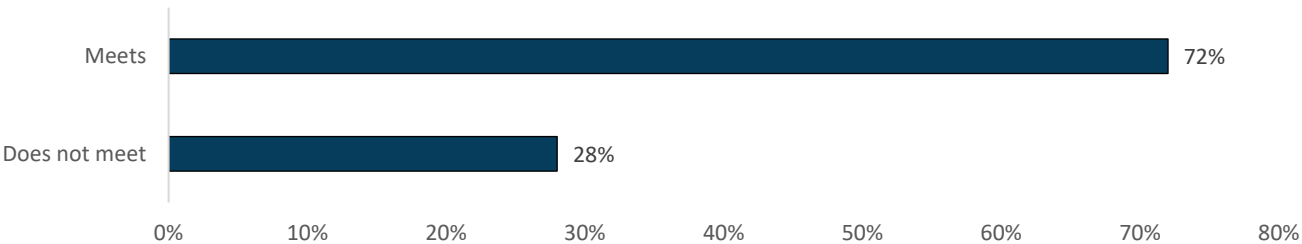
Note. Solid gray lines represent thresholds that ECHS campuses must meet to qualify for designation; campuses above the gray line meet the designation threshold for that student population. English learners and students with disabilities are not considered for designation; however, they are considered for designation with distinction. ECHS = Early College High School.

Following is an overview of ECHS program characteristics:

- ECHS programs are the most varied in their representation of at-risk students:
 - A total of 18% of ECHS campuses served a percentage of at-risk students that was more than 25 percentage points below that of the district (the lowest value being 72 percentage points below the district percentage).
 - A total of 11% of ECHS campuses served a percentage of at-risk students that was more than 10 percentage points higher than that of the district (with the highest value being 43 percentage points above the district percentage).
- The number of ECHS programs with OBM data underrepresenting at-risk students when compared to the district is 136 (74%).
- The number of ECHS programs underrepresenting students with disabilities when compared to the district is 173 (91%), and the number of ECHS programs underrepresenting English learners is 155 (82%).
- The number of ECHS programs underrepresenting economically disadvantaged students when compared to the district is 105 (56%).

Following the access OBM designation requirements in the 2021 ECHS Blueprints, 133 ECHS programs with OBM data that served Grade 9 students in 2021–22 (72%) meet the criteria for designation (see Exhibit 2).

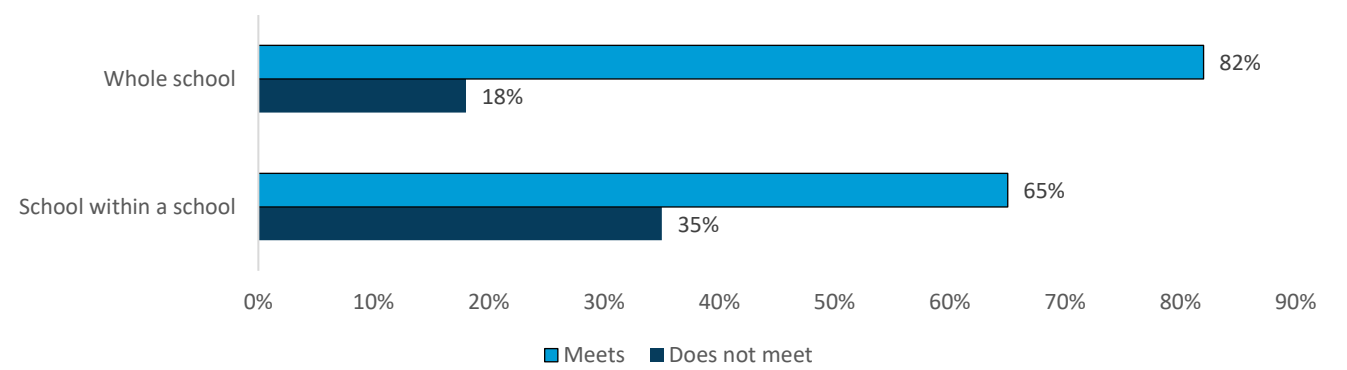
Exhibit 2. Percentage of ECHS Programs Meeting/Not Meeting Access Designation Criteria



Note. ECHS = Early College High School

When we examined access designation rates by campus type (see Exhibit 3), we found that the percentage of ECHS campuses that met access OBM designation criteria was higher among whole-school ECHS programs (82%) than among school-within-a-school programs (65%).

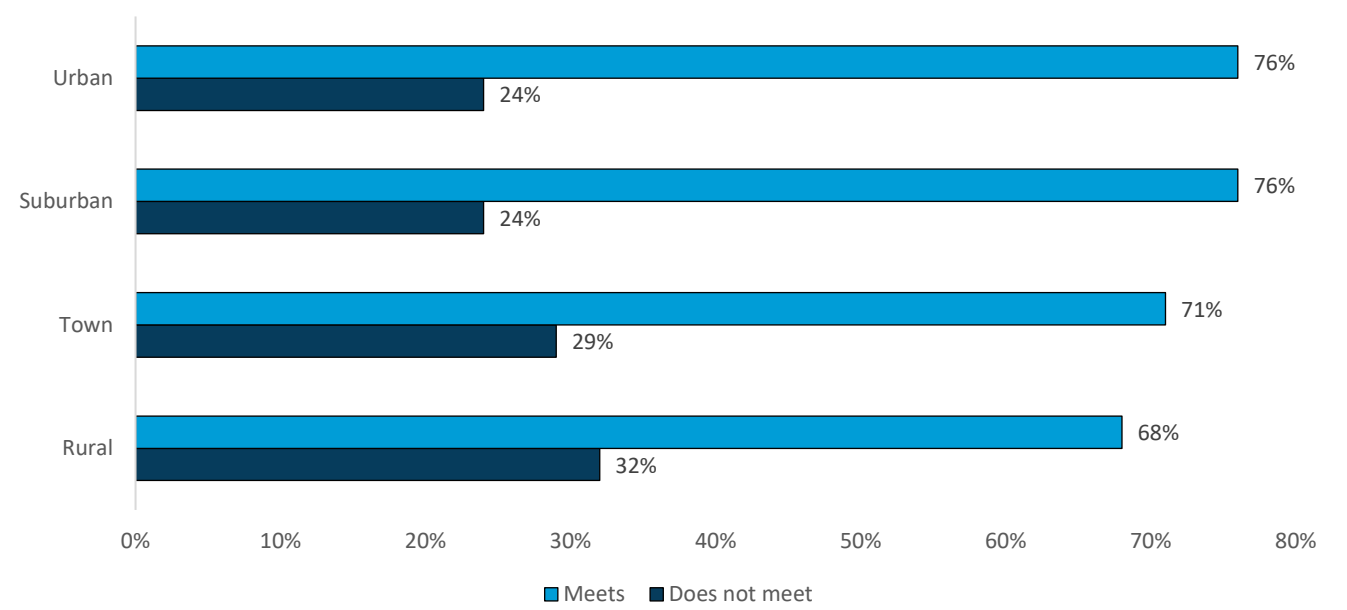
Exhibit 3. Percentage of ECHS Programs Meeting Access Designation Criteria, by Campus Type



Note. This exhibit includes 110 ECHS campuses that operate as school-within-a-school programs and 73 ECHS campuses that operate as whole-school programs. ECHS = Early College High School.

As we show in Exhibit 4, the percentage of ECHS campuses that met access OBM designation criteria was slightly lower in rural areas (68%) when compared with suburban and urban areas (76%).

Exhibit 4. Percentage of ECHS Programs Meeting Access Designation Criteria, by Level of Urbanization

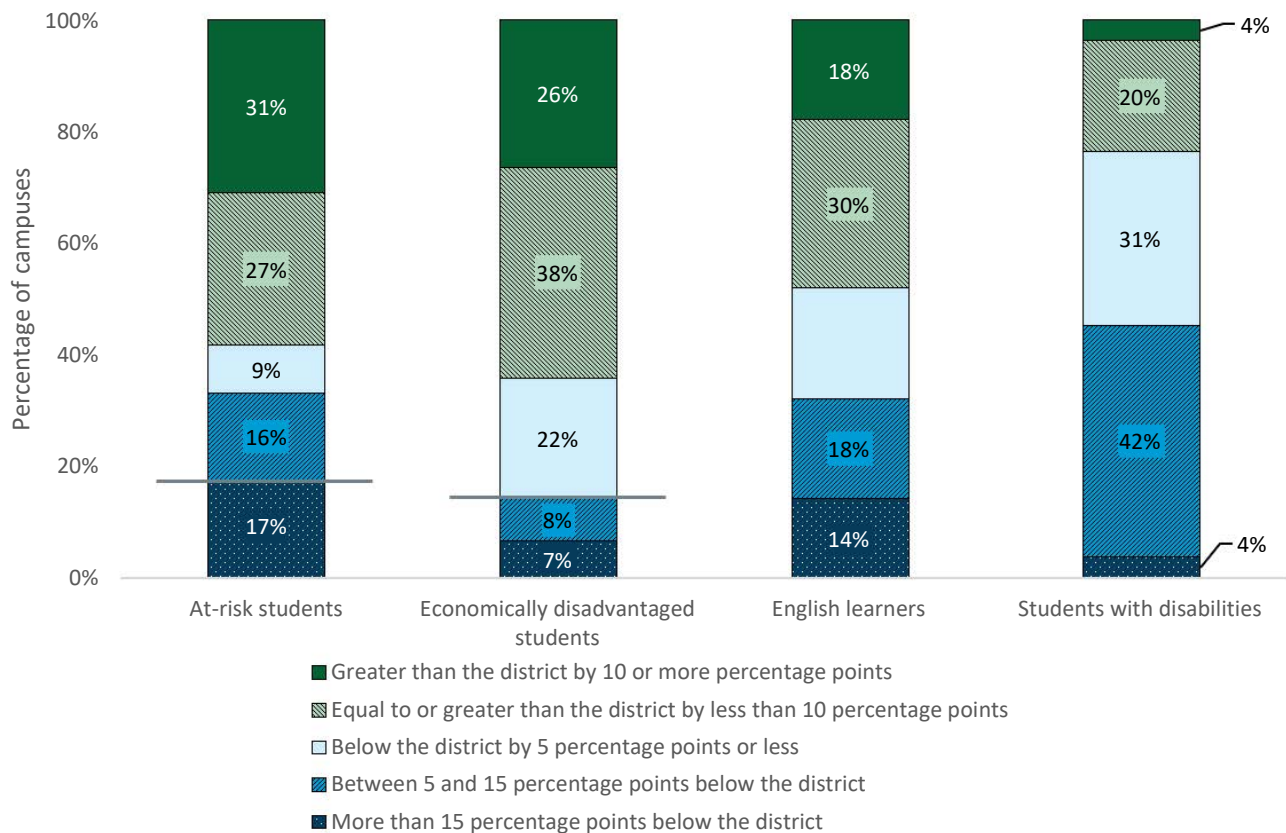


Note. This exhibit includes 34 ECHS campuses in rural areas, 50 ECHS campuses in suburban areas, 17 ECHS campuses in towns, and 79 ECHS campuses in urban areas. ECHS = Early College High School.

P-TECH Programs

Of the 276 P-TECH programs in operation in the 2023–24 school year, 106 had OBM data addressing equitable student access in 2021–22 because they had been in operation for at least 3 years. In Exhibit 5, we illustrate the difference between P-TECH programs and their districts in the percentage of students in each of the four groups identified in the P-TECH blueprints as traditionally underserved in higher education.

Exhibit 5. Comparison of P-TECH Campuses and Their Districts on the Percentage of Students Identified as At Risk, Economically Disadvantaged, English Learners, and Students With Disabilities

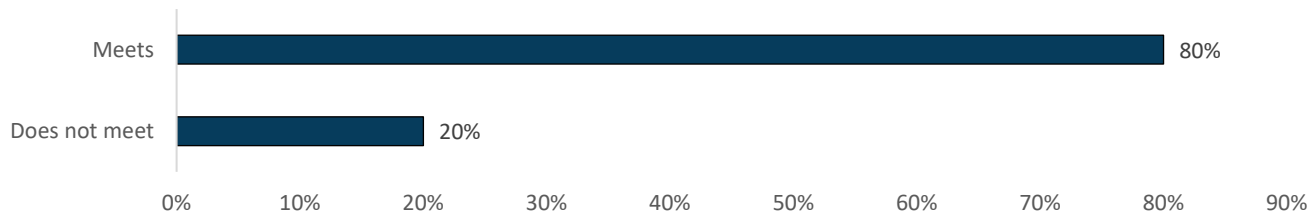


Note. Solid gray lines represent thresholds that P-TECH campuses must meet to qualify for designation; campuses above the gray line meet the designation threshold for that student population. English learners and students with disabilities are not considered for designation; however, they are considered for designation with excellence. P-TECH = Pathways in Technology Early College High School.

- The majority of P-TECH campuses (77%) have an underrepresentation of students with disabilities.
- In contrast, the majority of P-TECH programs have an equal or overrepresentation of economically disadvantaged students (64%) and at-risk students (58%) when compared to the district.
- P-TECH programs are relatively split in their representation of English learners: Whereas 52% of campuses underrepresent English learners, 48% of P-TECH campuses either represent or overrepresent English learners when compared to the district.

Following the access OBM designation requirements in the 2021 P-TECH Blueprints, 82 P-TECH programs with OBM data that served Grade 9 students in 2021–22 (80%) met the criteria for designation (see Exhibit 6).

Exhibit 6. Percentage of P-TECH Programs Meeting Access Designation Criteria

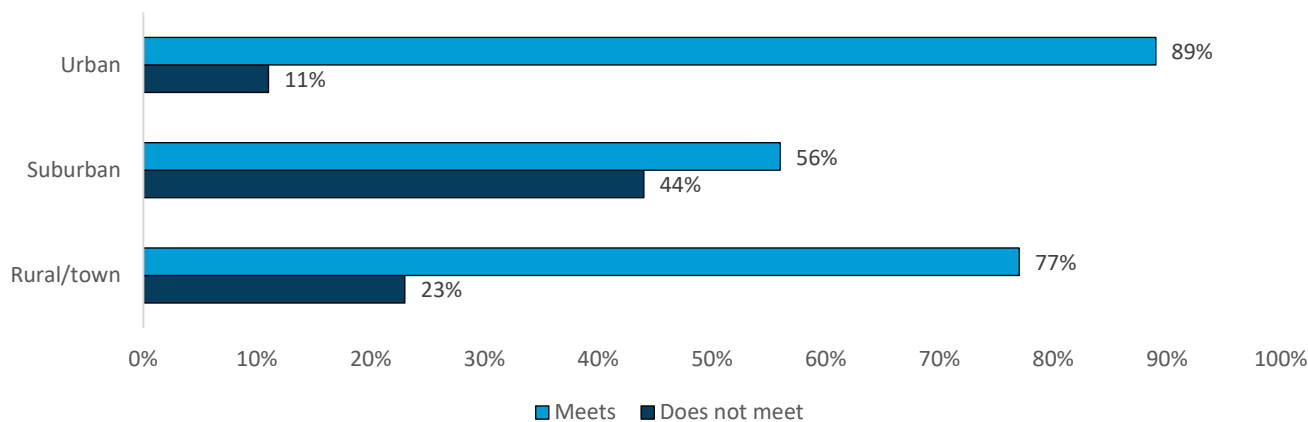


Note. P-TECH = Pathways in Technology Early College High School

Almost all P-TECH programs are school-within-a-school programs; among P-TECH programs with OBM data from the 2021–22 school year, only nine operated as whole-school programs. In general, the percentage of P-TECH campuses meeting access designation criteria did not vary by campus type, with more than three quarters of school-within-a-school and whole-school P-TECH programs meeting access designation criteria.

In Exhibit 7, we show the percentage of P-TECH campuses that met access designation criteria by level of urbanization. Due to the small number of P-TECH campuses in the data set that were located in towns, campuses in rural areas and towns are combined in this exhibit. In contrast with ECHS programs, where the percentage of programs meeting access OBM designation criteria was lower in rural areas, the percentage of P-TECH campuses that met access OBM designation criteria was lowest in suburban areas (56%) and highest in urban areas (89%).

Exhibit 7. Percentage of P-TECH Programs Meeting Access Designation Criteria, by Level of Urbanization



Note. This exhibit includes 18 P-TECH campuses in suburban areas, 30 P-TECH campuses in rural areas or towns, and 54 P-TECH campuses in urban areas. P-TECH = Pathways in Technology Early College High School.

Discussion

Findings from this research brief include the following:

- Although P-TECHs had higher thresholds for access (meaning that they must resemble the district more closely than must ECHS campuses), P-TECH campuses were more likely to meet access designation requirements than were ECHS campuses. In fact, P-TECH programs were more likely to have an *overrepresentation* of at-risk students and economically disadvantaged students relative to their districts rather than an *underrepresentation*.
- Whereas ECHS campuses in suburban and urban areas were *most likely* to meet access designation criteria, P-TECH campuses in suburban areas were *least likely* to meet access designation criteria. Perhaps there is some tension in suburban areas related to ECHS and P-TECH programs competing to serve the same target student populations.
- Among ECHS campuses, school-within-a-school programs were less likely to meet access designation criteria than whole-school programs. This may be related to the fact that some school-within-a-school programs may draw primarily from the population of students enrolled in the school, whereas whole-school programs may have more success recruiting ECHS students from across the district.



1400 Crystal Drive, 10th Floor
Arlington, VA 22202-3289
+1.202.403.5000 | [AIR.ORG](https://www.air.org)

Established in 1946, the American Institutes for Research® (AIR®) is a nonpartisan, not-for-profit institution that conducts behavioral and social science research and delivers technical assistance both domestically and internationally in the areas of education, health, and the workforce. AIR's work is driven by its mission to generate and use rigorous evidence that contributes to a better, more equitable world. With headquarters in Arlington, Virginia, AIR has offices across the U.S. and abroad. For more information, visit [AIR.ORG](https://www.air.org).

Copyright © 2024 American Institutes for Research®. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, website display, or other electronic or mechanical methods, without the prior written permission of the American Institutes for Research. For permission requests, please use the Contact Us form on [AIR.ORG](https://www.air.org).

Notice of Trademark: "American Institutes for Research" and "AIR" are registered trademarks. All other brand, product, or company names are trademarks or registered trademarks of their respective owners.

25190_06/24