

State Dual Enrollment Policies: Addressing Access and Quality



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EXECUTIVE SUMMARY

Policymakers and educators seek options for helping high school students transition successfully into postsecondary education. Though there are a variety of approaches to doing this, some initiatives are based on a body of research demonstrating that postsecondary success is predicated on both rigorous academic preparation and a clear understanding of the expectations in college. Dual enrollment programs allow high school students to enroll in college courses and earn college and high school credit simultaneously, thereby exposing them to the academic and social demands of postsecondary education.

In most states, dual enrollment programs have only recently become the subjects of legislation. Thus, the regulatory landscape of dual enrollment is unclear. This report begins to explore state sponsorship and regulation of dual enrollment programs by analyzing and summarizing dual enrollment legislation in all 50 states. It also explores the implications of state policy for individual programs and students, and the ways that policies can promote or inhibit the spread of dual enrollment programs. Finally, given current interest in expanding dual enrollment access to students beyond the most academically advanced, this report asks the questions of how—and whether—state policies can encourage access to dual enrollment programs for a broader range of students, particularly middle- and low-achieving students.

This report identifies 10 features along which dual enrollment programs can vary: target population; admissions requirements; location; student mix; the background characteristics of the instructors; course content; method of credit-earning; program intensity; funding; and state mandates.

State policies vary widely with regard to the attention paid to these features. Twelve states do not have any legislation or state regulation addressing dual enrollment at all. It can be inferred that, where no state policy exists, institutions may decide on their own how to best implement program features. Of the remaining states that do have policy, none address all 10 features. Program structure is the least governed area, while student admissions and program finances are most often addressed by state policy. States have a vested interest in ensuring that 1) their financial investment in dual enrollment is used wisely, and 2) dual enrollment programs remain college-level and do not dilute the meaning of credit earned through state postsecondary institutions. States have less of an interest in promoting a specific model, as it seems possible to achieve program goals through a variety of structures.

Thus, states that do have dual enrollment policies take a variety of approaches, with some states offering detailed regulation and others providing only minimal guidance. This report emphasizes the many choices inherent in creating policies that address

multiple elements of a state education system. The desire to promote access to dual enrollment for a broad range of students may conflict with the need to maintain academic standards. States' desires to ensure that no stakeholder is deterred from participating in dual enrollment due to funding constraints must be balanced with states' needs to ensure that dual enrollment does not become a drain on resources.

The conclusion presented in this report provides recommendations to policymakers and program regulators:

- Clarify program goals so that the policies and regulations support the stated goals of the program.

- Identify funding mechanisms that meet the needs of all stakeholders.
- Think through the implications of both minimal and detailed dual enrollment policies on program activities. Develop ways to ensure the rigor of dual enrollment courses.
- Identify the needs of students beyond academic course taking.
- Meet the needs of students interested in technical courses as well as academic courses.

EXHIBIT 1: STATE POLICY CHART

The matrix below provides a brief overview of the 50 states' policies. A check indicates that the policies address one of the ten programmatic features that framed the analysis. To further guide your interpretation, a legend of all terms used follows the matrix. If a state's profile is blank, there are no state-level policies affecting program operations. For a richer perspective, the full report provides greater depth along with examples.

State	State Policy	State Oversight	Target Population	Admissions Requirements-Student Age	Admissions Requirements-Academics	Location	Student Mix	Instructor	Course Content	Tuition	Funding
Alabama	Not Specified ✓			Freshmen and Sophomores Permitted ✓	State Requirements: Advanced ✓	Either ✓				Student Pays ✓	
Alaska											
Arizona	Mandatory ✓	Quality Control ✓		Juniors and Seniors Only ✓	State Requirements: Combination ✓	Either ✓		College Credentials ✓	Standardized; College Approval; Limits ✓	Institutional Decision ✓	Double Funding ✓
Arkansas	Mandatory ✓			Freshmen and Sophomores Permitted ✓	Secondary Institution Discretion ✓	Either ✓				Student Pays ✓	
California	Mandatory ✓	Financial Reporting ✓	Enrichment ✓		Secondary Institution Discretion ✓	Either ✓	Mixed ✓		College Approval ✓	Student Pays ✓	Double Funding ✓
Colorado	Mandatory ✓		Enrichment ✓			College Campus ✓				Institution Pays ✓	Colleges Lose Funds ✓
Connecticut											
Delaware											
Florida	Mandatory ✓		Enrichment Technical Students ✓		State Requirements: Combination ✓	Either ✓			Limits ✓	Institution Pays ✓	
Georgia	Mandatory ✓	Quality Control ✓		Juniors and Seniors Only ✓	State Requirements: Advanced ✓			Postsecondary Instructors Only ✓	State Approval ✓	State Pays ✓	Both Lose Funds ✓
Hawaii											
Idaho	Mandatory ✓			Juniors and Seniors Only ✓	State Requirements: Advanced ✓	Either ✓				Institution Pays ✓	Double Funding ✓
Illinois	Not Specified ✓		Advanced Students ✓			Either ✓				State Pays ✓	Double Funding ✓
Indiana	Mandatory ✓			Juniors and Seniors Only ✓	State Requirements: Advanced ✓					State Pays ✓	Partial ✓
Iowa	Not Specified ✓			Juniors and Seniors Only ✓					Limits ✓	Institution Pays ✓	
Kansas	Voluntary ✓		Enrichment ✓		Postsecondary Institution Discretion ✓				State Approval ✓	Student Pays ✓	
Kentucky	Mandatory ✓				Postsecondary Institution Discretion ✓						
Louisiana											
Massachusetts	Not Specified ✓		Enrichment ✓		State Requirements: Combination ✓						
Maryland	Not Specified ✓										
Maine	Mandatory ✓			Dual System ✓	State Requirements: Combination ✓					State Pays ✓	

State	State Policy	State Oversight	Target Population	Admissions Requirements-Student Age	Admissions Requirements-Academics	Location	Student Mix	Instructor	Course Content	Tuition	Funding
Michigan	✓ Mandatory	✓ Financial Reporting			✓ State Requirements: Proficient	✓ Either	✓ Mixed or High School Only	✓ Professional Development		✓ Institution Pays	✓ Both Lose Funds
Minnesota	✓ Mandatory					✓ Either			✓ Limits	✓ State Pays	✓ Double Funding
Missouri	✓ Voluntary	✓ Policy Compliance	✓ Advanced Students		✓ State Requirements: Advanced	✓ Either		✓ College Credentials; Professional Development	✓ Standardized; Limits	✓ Institutional Decision	✓ Double Funding
Mississippi	✓ Voluntary										✓ Partial Policy
Montana	✓ Not Specified			✓ Juniors and Seniors Only	✓ Secondary Institution Discretion					✓ Institutional Decision	
Nebraska											
Nevada	✓ Mandatory	✓ Quality Control									
New Hampshire											
New Jersey	✓ Mixed		✓ Enrichment			✓ Either	✓ Mixed or High School Only				
New Mexico											
New York											
North Carolina	✓ Not Specified	✓ Quality Control	✓ Enrichment			✓ Either	✓ Mixed or High School Only			✓ Institution Pays	✓ Both Lose Funds
North Dakota	✓ Mixed			✓ Juniors and Seniors Only	✓ Postsecondary Institution Discretion	✓ Either		✓ College Credentials	✓ College Approval	✓ State Pays	
Ohio	✓ Mandatory			✓ Freshmen and Sophomores Permitted	✓ State Requirements: Combination		✓ Mixed			✓ Institution Pays	✓ Both Lose Funds
Oklahoma	✓ Mandatory				✓ State Requirements: Advanced	✓ Either	✓ Mixed or High School Only	✓ College Approval		✓ Student Pays	
Oregon	✓ Voluntary	✓ Quality Control		✓ Juniors and Seniors Only	✓ Postsecondary Institution Discretion	✓ Either		✓ College Approval	✓ State Approval		
Pennsylvania											
Rhode Island											
South Carolina											
South Dakota	✓ Mandatory			✓ Freshmen and Sophomores Permitted		✓ College Campus				✓ Student Pays	
Tennessee	✓ Voluntary		✓ Advanced Students	✓ Juniors and Seniors Only	✓ State Requirements: Advanced	✓ Either		✓ College Approval	✓ High School Approval		✓ Partial

State	State Policy	State Oversight	Target Population	Admissions Requirements- Student Age	Admissions Requirements- Academics	Location	Student Mix	Instructor	Course Content	Tuition	Funding
Texas	✓ Voluntary				✓ State Requirements: Proficient	✓ Either	✓ Mixed or High School Only	✓ College Credentials		✓ Institutional Decision	✓ High Schools Lose Funds
Utah	✓ Not Specified	✓ Quality Control			✓ Joint Decision	✓ Either		✓ College Credentials	✓ College Approval	✓ State Pays	
Virginia	✓ Mandatory	✓ Quality Control		✓ Juniors and Seniors Only	✓ State Requirements: Advanced	✓ Either		✓ College Credentials	✓ College Approval; Limits	✓ Institutional Decision	✓ Double Funding
Vermont	✓ Voluntary		✓ Technical Students		✓ Postsecondary Institution Discretion	✓ College Campus				✓ Institution Pays	
Washington	✓ Mandatory	✓ Quality Control		✓ Juniors and Seniors Only	✓ State Requirements: Advanced	✓ Either				✓ Institution Pays	✓ High Schools Lose Funds
West Virginia	✓ Not Specified									✓ Institutional Decision	
Wisconsin	✓ Not Specified			✓ Juniors and Seniors Only	✓ State Requirements: Combination					✓ Institution Pays	
Wyoming	✓ Voluntary				✓ Postsecondary Institution Discretion	✓ Either	✓ Mixed or High School Only	✓ Secondary or Postsecondary Instructor		✓ Institution Pays	✓ Double Funding

LEGEND

State Policy

Mandatory: High schools must inform students of program opportunities and colleges must accept credit.

Voluntary: High schools and colleges have the option of participating in program opportunities.

Not Specified: State policies do not specify whether the program is mandatory or voluntary.

State Oversight

Financial Reporting: Require annual reporting of program finances.

Policy Compliance: Programs must provide evidence that they are complying with state dual enrollment requirements.

Quality Control: Programs must report annually on their course offerings or student outcomes.

Target Population

Advanced Students: Dual enrollment programs are intended to meet the needs of academically advanced or gifted students.

Enrichment: Dual enrollment programs are intended to provide enrichment for students who have special or academic or vocational needs.

Technical Students: Dual enrollment programs are intended to provide technical education.

Admissions Requirements - Student Age

Juniors and Seniors Only: Student participation is limited to juniors and seniors.

Freshmen and Sophomores Permitted: Participation is made available to students in grades 9 or 10 and above.

Dual System: Participation is open to all students but admissions requirements vary depending upon students' age.

Admissions Requirements - Academics

State Requirements

Advanced: Students must be academically advanced, as evidenced by meeting criteria such as a grade point average of 3.0 or above and/or 1,000 or above on the Scholastic Aptitude Test (SAT).

Proficient: Students must be academically proficient, as evidenced by meeting criteria such as a grade point average of 3.0 or below and/or below 1,000 on the SAT.

Combination: Students must meet criteria that vary depending upon the course of study they intend to undertake.

Postsecondary Institution Discretion: Admission requirements are set by the postsecondary partner.

Secondary Institution Discretion: The secondary partner sets admission requirements.

Joint Decision: Both the secondary and postsecondary partners set admission requirements.

Location

College Campus: Courses must take place on the campus of a postsecondary institution.

Either: Courses may take place at either the high school or the college.

Student Mix

Mixed: Dual enrollment students must take the same classes as regularly matriculated college students.

Mixed or High School Only: Dual enrollment students may take their classes with regularly matriculated college students, or in classes consisting only of high school students.

Instructor

College Credentials: High school instructors must have the same credentials as college faculty.

College Approval: College approves high school instructors; instructors need not have the same credentials as the college faculty.

Postsecondary Instructors Only: Only college instructors may teach the courses.

Professional Development: High school teachers must participate in professional development.

Secondary or Postsecondary Instructor: Instructors may hold either a high school or a college teaching credential.

Course Content

Limits: States limit the types of courses that may be offered through dual enrollment.

College Approval: College must approve course syllabus, textbook and/or exams.

High School Approval: High school must approve course syllabus, textbook and/or exams.

Standardized: Courses must use a standardized curriculum, books and/or textbook.

State Approval: State education agency must approve course syllabus, textbook and/or exams.

Tuition

Student Pays: Student is responsible for tuition costs.

Institutional Decision: College and/or high school decides who is responsible for tuition.

Institution Pays: College or high school is responsible for tuition costs.

State Pays: State is responsible for tuition costs.

Funding

Double Funding: Neither institution loses funds—both are funded at their full rate.

High Schools Lose Funds: High school loses average daily attendance (ADA) funding for dual enrollment students.

Colleges Lose Funds: Colleges do not receive full-time equivalent (FTE) funding for dual enrollment students.

Both Lose Funds: Both colleges and high schools lose some, but not all, of their FTE and ADA funding for dual enrollment students.

Partial Policies: Precise funding is not specified, but it is clear that at least one institution's FTE or ADA funding is affected by dual enrollment students.

STATE DUAL ENROLLMENT POLICIES

Policymakers and educators continue to seek options for helping high school students transition successfully into postsecondary education. This interest stems, in large part, from evidence that American students are unprepared for college, despite their stated intentions to pursue higher education. For example, the majority of 12th-graders say that they “definitely” intend to earn a bachelor’s degree (NCES, 2001). In 2001, 28 percent of high school graduates held a bachelor’s degree (NCES, 2002). Only 58 percent of high school graduates aged 25 to 29 had completed some college.

Despite a national focus on increasing the rigor of high school, many students entering college appear to be unprepared for college-level work. Nearly half of all postsecondary students need at least one remedial course upon entering college (NCES, 2001).

Remediation extends the time it takes for students to earn their degrees, costing students and states money, both in terms of additional tuition and education-related expenses and in terms of lost wages and revenue. Students required to take many remedial courses are also more likely to drop out of college before receiving a degree than their counterparts in need of less remedial assistance (Deil-Amen and Rosenbaum, 2002).

There are a variety of ways to address these problems. States may raise the academic requirements for high school students or link these requirements with college placement exams. Students may also benefit from intense academic and extracurricular college preparation experiences, such as those provided by the federally funded GEAR UP and TRIO programs. College-based orientation programs that provide entering

students with emotional support may help them with their social and psychological adjustment. It should be noted that scientifically based research has not shown any of these interventions to be effective.

Other attempts to help students enter and succeed in college are based on a body of research demonstrating that postsecondary success is predicated on both rigorous academic preparation and a clear understanding of the expectations in college (cf. Venezia, Kirst, and Antonio, 2003). This approach suggests that high schools and colleges should work together, and that blurring the distinction between the two education sectors may help students to be more successful. As such, policymakers should seek to promote programs and policies that help link secondary and postsecondary education.

Dual enrollment is one type of program that does just this, and which appears to have grown rapidly at the program level. It also appears to be receiving increasing attention at the state policy level. Dual enrollment

programs allow high school students to enroll in college courses and earn college and high school credit simultaneously. These programs, also called dual credit or concurrent enrollment, have existed for many years. In most states, however, they have only recently become the subjects of legislation and regulation.¹ Thus, the regulatory landscape of dual enrollment is unclear. Researchers, practitioners, and policymakers are asking the following questions in relationship to dual enrollment policies. *What do state policies say? Are states consistent in their demands on and expectations of dual enrollment programs? More importantly, what are the implications of state policies for local programs?* This report begins to answer these questions by analyzing dual enrollment legislation in all 50 states, and providing a summary of current legislation and policy mechanisms. It also explores the implications of state policy for individual programs and students.

This report pays particular attention to the ways that policies can promote or inhibit the spread of dual enrollment programs. In general, dual enrollment policies have two effects on programs. First, they may make implementation more difficult. Such is the case when policies limit course location or strictly regulate dual enrollment instructors' credentials. Second, policies may limit student access to dual enrollment, such as when states implement rigorous entrance requirements.

Traditionally, dual enrollment has been targeted toward the most academically proficient high school students, who are thought to be capable of performing at the

college level. It is now being suggested by educators and policymakers that a broader range of students could benefit from these programs. A number of authors (cf. Lords, 2000) argue that many students can achieve at higher levels if only they are challenged to do so. It may be possible for dual enrollment to help even low-achieving students become prepared for college by exposing them to the rigorous academic course work that research has shown to be related to future college success (Adelman, 1999). Participation in dual enrollment could help students better understand the level of work expected of them in college. Policymakers also hope that expanding dual enrollment participation will minimize the need for remediation in college (AASCU, 2002; Martinez and Bray, 2002; National Commission on the High School Senior Year, 2001).

As highlighted in Bailey and Karp (2003), there is little research examining these programs and their influence on middle- and low-achieving students. It is not clear that students who are marginally or not at all successful in high school can do college-level academics. Some authors argue that dual enrollment is not an appropriate intervention for such students (cf. Greenberg, 1988) and question the ability of broadly targeted dual enrollment programs to actually provide college-level curriculum to students (cf. Johnstone and Del Genio, 2001).

This report seeks to answer how—and whether—state policies can encourage access to dual enrollment programs for a broader range of students, particularly middle- and low-achieving students. The analysis of state

policies therefore was completed with a focus on the ways that state policies promote or inhibit broad student participation in dual enrollment.

DUAL ENROLLMENT PROGRAM VARIATION

Dual enrollment programs allow high school students to enroll in college courses and earn both college and high school credit. Unlike Advanced Placement or International Baccalaureate programs, dual enrollment courses are actual college courses—rather than college-like or college-level—and usually result in students' progress being recorded on a college transcript from the sponsoring postsecondary institution. Dual enrollment students are typically admitted as nondegree students to the institution offering the dual enrollment course, sometimes even receiving college identification cards and access to college facilities and events. As such, dual enrollment programs require high schools and colleges to collaborate and share institutional knowledge and responsibility. This means that dual enrollment programs may simultaneously meet students' needs for academic rigor and promote greater coordination between the secondary and postsecondary education sectors.

Dual enrollment programs vary greatly from program to program depending on their individual academic prerequisites for enrollment, program structures and funding streams. Some of these differences are the result of state policies, as this paper will explore more fully, while others are the result of institutional decisions.

Student eligibility is an area that is particularly varied (cf. Boswell, 2001). Some of the variability stems from different program goals; programs hoping to increase postsecondary access for underachieving students are likely to have different entry standards from those focused on providing enrichment for advanced students. Stringent admissions criteria are often imposed by colleges in an attempt to ensure that the course content can be truly classified as college-level. As some scholars (cf. Johnstone and Del Genio, 2001; Clark, 2001) have pointed out, college officials are often skeptical of the value of credit earned through dual enrollment, particularly through programs located at high schools and taught by high school teachers. Maintaining high entry standards is one way that programs can address such concerns. Hence, some programs require students to have relatively high grade point averages and/or high scores on standardized tests. Other programs stipulate that students pass the proficiency tests given to all incoming college freshmen. By contrast, opening dual enrollment to a wide range of students exerts the opposite pressure, encouraging less stringent admissions standards. Some states and colleges allow the high schools to determine which students are qualified for the programs.

Programs also vary in the way they are structured and implemented. Many analysts (cf. Bragg, 2001; Clark, 2001; Johnstone and Del Genio, 2001; Orr, 2002) have developed typologies for the programmatic differences found among dual enrollment programs (and often, other credit-based transition² programs).

Although these typologies differ somewhat, they generally demonstrate that dual enrollment programs can vary along several characteristics. For example, dual enrollment courses can be offered on a college campus or at the high school of enrolled students. Program instructors can vary, as dual enrollment courses can be taught by regular college faculty or by specially certified high school teachers. Likewise, some dual enrollment programs teach high school students in their own classes, while others teach high school and college students together. Finally, programs can vary in terms of the credits earned. In some programs, students earn college credit upon course completion, but others require students to enroll in postsecondary education or have their knowledge validated through a test in order to receive the credit. When credit is not automatically awarded, this is referred to as credit-in-escrow.³

Additionally, Bailey and Karp (2003) note that dual enrollment (and other credit-based transition programs) can vary in intensity and their focus on exposing students to a wide range of “college-like” experiences. They conceive of three broad categories of intensity:

- *Comprehensive programs*, which subsume most of a student’s academic experience; and
- *Enhanced comprehensive programs*, which offer students college course work coupled with nonacademic support such as counseling or mentoring to promote their success in postsecondary education.

Generally, dual enrollment programs are singleton or comprehensive, though occasionally they include the types of enrichment activities offered by enhanced comprehensive programs.

Credit-based transition programs, including middle college high schools, Tech-Prep, the Advanced Placement (AP) program and International Baccalaureate (IB), share the goals of promoting student access to and success in college.⁴ For a number of reasons, however, this report limits its policy analysis to state policies and regulations related solely to dual enrollment. First, state policy specifically directed at dual enrollment is more common than policy addressing all forms of credit-based transition programs. Although quite a few states have policies related to AP or IB (particularly related to helping students pay for the programs’ costly end-of-course exams), such policies are not widespread and states do not typically regulate the programs themselves.

That is not to say, however, that legislation addressing dual enrollment might not also affect the other types of initiatives. For example, Tech-Prep programs seeking to shift from a credit-in-escrow to a transcribed credit model will be affected by state dual enrollment policies. Likewise, middle college

Exhibit 2: Program Variation

- | | |
|---------------------|------------------|
| ■ Entrance criteria | ■ Student Mix |
| ■ Financing | ■ Credit Earning |
| ■ Location | ■ Intensity |
| ■ Instructors | |

- *Singleton programs*, which refer to stand-alone college-level courses;

and early college high schools⁵ may have to work within state guidelines when seeking to enroll their students in college courses. Thus, dual enrollment legislation and regulation have the potential to impact a range of credit-based transition initiatives.

Finally, the increasing popularity of dual enrollment requires a careful understanding and analysis of policies and their implications. In some states, dual enrollment policies are long-standing and well established. In others, the policies are only now emerging. Those seeking to expand dual enrollment opportunities should understand how legislation might influence program structure and student access, among other things.

METHODS

The data for this report include all publicly available state policies and regulations regarding dual enrollment programs. Researchers explored state Web sites, focusing on the entities governing education and downloaded all legislative and regulative language pertaining to dual enrollment, as well as program descriptions. Researchers also used Web sites such as those of WestLaw, FindLaw, and the Education Commission of the States (ECS) to supplement findings from state Web sites.

For the purposes of this report, “state dual enrollment policies” were defined as legislative statutes, executive orders or mandates, or regulations from *state government education entities* (for example, the state department of education or the statewide education coordinating board) addressing opportunities for high school

students to enroll in college courses and earn high school and college credit simultaneously.

Each state’s statutes, regulations, and program information were analyzed in order to determine the extent to which they addressed a variety of possible program features. In particular, the following *ten* program criteria were explored in the analysis:

- **Target population:** Does state policy mandate or encourage programs to target a specific type of student, and, if so, which type?
- **Admissions requirements:** Does state policy regulate how students are admitted into dual enrollment programs or outline criteria they must meet to be eligible for participation? If so, what are these criteria?
- **Location:** Do state policies specify whether dual enrollment may be offered at the high school, the college or both locations?
- **Student mix:** Are there policies addressing whether high school students may, may not, or must be in dual enrollment courses with regularly matriculated college students?
- **Instructor:** Do policies specify the credentials that dual enrollment teachers must hold?
- **Course content:** How do states ensure that dual enrollment courses are college-level? Are there any regulations governing the content and student evaluation methods of dual enrollment courses?
- **Method of credit-earning:** How do dual enrollment students earn credit? Is this

regulated by the state, and, if so, what do such policies say?

- **Program intensity:** Does state policy encourage or mandate singleton, comprehensive or enhanced comprehensive programs?
- **Funding:** How are dual enrollment programs funded? Does state policy address the responsibility for payment of student tuition and fees? What happens to Full Time Enrollment (FTE) and Average Daily Attendance (ADA) funding for dual enrollment students?
- **Mandatory nature of the policy:** Are dual enrollment programs required by state policy, or simply permitted at an individual institution's discretion?

Statutes and regulations were coded according to each topic listed above. This coding enabled the researchers to compare policies across states. In addition to noting which states had policies related to each topic, the coding scheme allowed for analysis of the specifics of each policy.

In addition to analyzing the program features supported by state policies and making comparisons across states, researchers also identified emerging themes and issues that policymakers should be attentive to when crafting or modifying dual enrollment regulations. For a more detailed explanation of this report's methodology, please see the Methodological Appendix.

FINDINGS

State policies vary widely. No state has a policy addressing all 10 analytical categories explored in this report. Twelve states⁶ do not

have any legislation or state regulation addressing the enrollment of high school students in college courses for dual credit programs. Although in some of these cases the state university systems may have policies regarding dual enrollment, for the purposes of this report, we do not consider these to be the same as state oversight.⁷ The data collection methods did not allow the researchers to explore directly the influence that a lack of policy might have on programs. However, it can be inferred that, in areas where no state policy exists, institutions may decide on their own how to implement program features.

Although these assumptions cannot be confirmed systematically by the current study, they fit with observations of dual enrollment programs in states without policy. In New York, for example, institutions decide on the program model and admissions requirements. These vary depending upon the institution, such that the City University of New York (CUNY) has different eligibility requirements for its dual enrollment program than does Hudson Valley Community College (HVCC) (Community College Research Center fieldwork, 2002-2003). CUNY pays the tuition of dual enrollment students, but at HVCC, high school students pay a discounted tuition rate to participate in the program. Because state policy does not prevent it, and because it is in the institutions' interest, both secondary and postsecondary institutions in these two partnerships receive state ADA or FTE funding for their dual enrollment students.

In other words, a lack of state policy or regulation leaves program decisions up to the participating institutions. This offers institutions flexibility but can create uneven program structures and quality across the state. In the majority of states, however, at least some aspects of dual enrollment are regulated. It is to these regulations—their prevalence and implications—that this report now turns.

General Policies and Program Oversight

Nature of Dual Enrollment Policies

Data analysis revealed that state dual enrollment policies, though prevalent, are not found in all 50 states. Of the 38 states with policies or regulations, 18⁸ mandate that dual enrollment opportunities be provided to students. In other words, high schools must inform students of their option to take college courses and must accept at least some credits earned in college toward high school graduation. Likewise, postsecondary institutions in these states are not permitted to deny access to students for the sole reason that the students are still enrolled in high school. It is important to note that mandated dual enrollment does not mean that institutions must develop and implement a dual enrollment “program,” organized and administered by educational institutions—rather, mandatory dual enrollment means that high school students must have the option of enrolling in postsecondary education.

In eight states,⁹ legislation gives high schools and colleges the *option* to provide dual enrollment opportunities to students but does not require them to do so. It is likely

that students in these states have a variety of opportunities to participate in dual enrollment, depending upon where they live and where they go to school. Participation may be influenced by the resources of local schools and colleges, rather than by student needs. This type of policy preserves local authority by allowing high schools and colleges to decide whether or not dual enrollment is a program in which they would like to invest. Ten states do not specify whether dual enrollment is mandatory or voluntary, though it can be assumed that in these states it is optional.

Exhibit 3: Nature of Dual Enrollment Policy

Program Feature	#	States
States without dual enrollment policy	12	Alaska, Connecticut, Delaware, Hawaii, Louisiana, Nebraska, New Hampshire, New Mexico, New York, Pennsylvania, Rhode Island, South Carolina
States with dual enrollment policy	38	Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Mississippi, Montana, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming
■ Must be offered	18	Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Indiana, Kentucky, Maine, Michigan, Minnesota, Nevada, Ohio, Oklahoma, South Dakota, Virginia, Washington
■ Voluntary	8	Kansas, Missouri, Mississippi, Oregon, Tennessee, Texas, Vermont, Wyoming
■ Mixed approach	2	New Jersey, North Dakota
■ Not specified	10	Alabama, Illinois, Iowa, Maryland, Massachusetts, Montana, North Carolina, Utah, West Virginia, Wisconsin

Finally, two states take a mixed approach. In these states (New Jersey and North Dakota), high schools may choose whether or not to offer dual enrollment options to students. However, colleges are required to accept credit earned by dual enrollment students toward college graduation. In other words, colleges cannot refuse a student’s credit by virtue of the fact that it was earned while the student was still in high school.

Interestingly, state policies rarely address the intensity of dual enrollment programs. Though some states encourage one model, most policies leave open the question of program content. Legislation is structured to enable singleton, comprehensive and enhanced comprehensive programs to exist simultaneously.

To use Washington state as an example, both comprehensive and singleton programs are included in the legislation. The state’s college-based dual enrollment program, Running Start, can most commonly be described as a comprehensive dual enrollment program. Running Start students attend virtually all of their courses at the college campus, essentially leaving the high school in favor of college. However, some participating students take only part of their course load at the college, balancing secondary and postsecondary course work. Moreover, state policy also allows for College in the High School, a high school-based singleton model dual enrollment program. Additionally, nothing in the state policy would preclude the creation of an enhanced comprehensive program. Thus, rather than dictate program type, state policies allow

educators to decide which model is most appropriate for their student body and the institutional environment within which they function.

Credit Earning

In a similar vein, very few states dictate the method of credit earning, though most legislation implies that students shall earn dual credit via transcript. The one exception is South Dakota, where the method of credit-earning depends upon the type of institution in which the credit is earned. Students taking dual enrollment courses through a university earn college credit via transcript, and can transfer their credit to other postsecondary institutions in the state. Students who participate in dual enrollment at technical colleges, however, must take an exam to validate their dual credit if they want to transfer it to a university.

Exhibit 4: State Oversight

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
States whose policy includes dual enrollment oversight	11	See below for a list of states and specific characteristics.
■ Quality control	8	Arizona, Georgia, Nevada, North Carolina, Oregon, Utah, Virginia, Washington
■ Policy Compliance	1	Missouri
■ Financial reporting	2	California, Michigan

State Oversight

Only 11 states engage directly in oversight of dual enrollment, meaning that they require

some level of accountability on the part of participating institutions. Eight of these¹⁰ engage in some form of quality control—requiring programs to report annually on their course offerings or student outcomes (such as grades or college attendance). The extensiveness of these reports is unclear from publicly available documents. One other state (Missouri) requires programs to submit annual reports regarding their policy compliance, providing evidence that they adhere to guidelines regarding student admissions requirements and teacher qualifications. Missouri, however, does not require programs to report any outcomes data. California and Michigan require annual reporting of program finances (such as the number of FTEs paid to colleges for dual enrollment students or the annual costs of the dual enrollment program). It is possible that in other states, oversight occurs through other mechanisms, such as auditing of postsecondary institutions or general high school reporting measures, but this is not evident from the dual enrollment-specific policies.

In sum, dual enrollment policies are fairly common, with over two-thirds of states having at least some language governing dual enrollment programs. Only slightly more than half of these policies, however, are mandatory. In the other states, students are not guaranteed dual enrollment opportunities. Moreover, these policies frequently do not address the specifics of program model or method of credit earning, enabling individual institutions to determine these aspects of implementation.

Exhibit 5: State Regulation of Student Participation in Dual Enrollment

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
■ Policy language dictating student eligibility criteria	29	Arizona, Alabama, Arkansas, California, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Missouri, Montana, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Utah, Virginia, Vermont, Washington, Wisconsin, Wyoming
■ Recommended student eligibility criteria	1	Mississippi
■ No policy language regarding student eligibility	8	Colorado, Illinois, Maryland, Minnesota, Nevada, New Jersey, North Carolina, West Virginia

Student Eligibility

States often pay close attention to the criteria used to determine which students may participate in dual enrollment. Twenty-nine states offer policy language dictating student eligibility; another state has “recommended” admissions requirements to which institutions are not bound to adhere. The remaining eight states have no admissions requirements in their policies.

Admissions requirements are an important element of state policy, and have implications for both students and programs. Academically advanced and highly motivated students are probably headed for success in college, regardless of their dual enrollment participation. Policies restricting participation to these students are likely to exclude those students in need of an extra push toward college attendance. Additionally, stringent academic admissions requirements may

prevent students disengaged from traditional academic study from participating in dual enrollment courses.

However, restrictive admissions requirements may help ensure the academic rigor of courses, thereby addressing concerns that dual enrollment courses do not live up to the standard of “true” college courses or are little more than glorified high school courses. Such requirements also help maintain colleges’ control over the quality of their student bodies and discourage colleges from enrolling unqualified students in order to boost enrollments. From the perspective of higher education institutions, such requirements may be logical and beneficial. However, as will be highlighted below, some state policies have sought ways to include a range of students while maintaining program quality.

Admissions restrictions generally take two forms: 1) restricting the grade level of students eligible to participate and 2) setting academic requirements for program admissions. Of the 29 states with eligibility policies, 17 explicitly address the grade level of dual enrollment students. Twelve of these states¹¹ limit student participation to juniors and seniors. Although occasional exceptions are made for extremely high-achieving students in the younger grades, most students who are not yet in the 11th or 12th grade are unable to participate. Four states (Alabama, Arkansas, Ohio and South Dakota) specify that dual enrollment opportunities must be made available to students in grade 10 or above or in grade 9 or above.

Exhibit 6: State Regulation of Student Participation in Dual Enrollment by Year

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
States with policy language addressing student eligibility for dual enrollment	29	Please see Exhibit 5 for a complete list of states and characteristics.
States regulating the age of dual enrollment students	17	See below for a list of states and specific characteristics.
■ Juniors and seniors only	12	Arizona, Georgia, Idaho, Indiana, Iowa, Montana, North Dakota, Oregon, Tennessee, Virginia, Washington, Wisconsin
■ Freshmen and sophomores permitted	4	Alabama, Arkansas, Ohio, South Dakota
■ Dual System	1	Maine

To maintain a balance between high standards and open access, one state (Maine) has a dual tiered system. Dual enrollment is open to high school students of any age if they have a 3.0 grade point average, meet course prerequisites, and have high school and parental permission. If students do not meet these criteria, they must be in the 11th or 12th grades and have high school and college permission.

Grade level is just one aspect of admissions criteria that state policies may address. The other is academic achievement. Eligibility requirements addressing student academic achievement are complex and vary widely among states. These requirements were analyzed by using the following coding scheme:

- High school control (High schools are given the power to determine which students are eligible for dual enrollment.).
- College control (Colleges can determine which students are eligible for dual enrollment.).
- Students must demonstrate academic proficiency (Students must pass state proficiency tests; the cut-off grade point average is below 3.0; or the required cut-off score is below 1,000 on the SAT or below 22 on the ACT.).
- Students must be academically advanced (The minimum grade point average is 3.0 or above; cut-off scores are 1,000 or better on the SAT or 22 or above for the ACT; or students must gain regular admissions to the college or complete course prerequisites.).
- A combination of requirements targeted toward different programs or students.
- No academic requirements.

Of particular interest is the level of academic skill required. Demonstrating such skill seems reasonable, as states and programs understandably want to ensure that dual enrollment students are prepared for college-level work. In coding the skill requirements, the researchers sought to distinguish between requirements that guarantee a basic level of academic readiness, such as passing competency tests and demonstrating that remediation is not needed, and a more stringent set of criteria that might limit student participation to only the most advanced students. Hence, the criteria for *proficiency* were set to reflect the most basic level of academic skill, a minimum floor that would help promote success without unduly

limiting student participation. Advanced requirements were those that would effectively bar middle-level students and their lower-achieving peers from participating.

Exhibit 7: Eligibility Requirements

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
States with policy addressing student participation in dual enrollment	29	Please see Exhibit 5 for a complete list of states with policy addressing students participating in dual enrollment.
States leaving admissions requirements up to participating institutions	10	See below for a list of states and specific characteristics.
<ul style="list-style-type: none"> ■ Postsecondary institution discretion 	3	Oregon, Vermont, Wyoming
<ul style="list-style-type: none"> ■ Secondary institution discretion 	6	Arkansas, California, Kansas, Kentucky, Montana, North Dakota
<ul style="list-style-type: none"> ■ Joint decision 	1	Utah
State eligibility requirements: Proficient	2	Michigan, Texas
State eligibility requirements: Advanced	9	Alabama, Georgia, Idaho, Indiana, Missouri, Oklahoma, Tennessee, Virginia, Washington
State eligibility: Combination	6	Arizona, Florida, Maine, Massachusetts, Ohio, Wisconsin
State regulates student age only	2	Iowa, South Dakota

Ten states leave admissions up to the individual institutions offering the programs. This arrangement maintains institutional control but may result in inconsistencies across the state. It is possible that one school's admissions requirements differ enough from another's so as to change the

tone of the dual enrollment program. For example, fieldwork conducted previously by the Community College Research Center indicated that, in some states, differing admissions criteria led students to seek out colleges where they could more easily enroll in dual enrollment courses. It is possible that such a situation could lead postsecondary institutions to mistrust the quality of credit earned through dual enrollment programs. Additionally, two states' sole stipulation for student participation is grade level.

Interestingly, of the ten states that allow the institutions to set their own criteria, six¹² leave admissions decisions up to the high schools, while three (Oregon, Vermont and Wyoming) ensure postsecondary control. Since high schools know the students who wish to participate in dual enrollment and thus are most qualified to evaluate students' readiness, it appears to make sense to leave the admissions decision to the high schools. However, allowing high schools to govern college admissions eliminates postsecondary institutions' control over their own admissions process. Thus, although the colleges are ultimately responsible for the quality of students enrolling in their institution, leaving the admissions decision to the high schools means that colleges cannot set their own standards as to what "college ready" means. Utah seeks to balance the needs of secondary and postsecondary institutions by requiring that the institutions work together to set eligibility requirements.

Many states set their own eligibility requirements. Despite the calls for opening access to dual enrollment to a wide range of

students, most of these states require a high level of academic skill for participation in dual enrollment.

Only two states—Michigan and Texas—have admissions requirements coded as "proficient." Both of these states require dual enrollment students to pass the state high school exit exam before entering college courses. Presumably, students who are prepared to graduate from high school are also ready to tackle the challenges of college-level work. This is true even if their grade point averages are low.

Nine states¹³ require students to be relatively academically advanced. Some of these states require a high grade point average (usually a B average or better) or high achievement test scores. Others require students to earn admission to the participating college under the same procedures as regularly matriculating college students. These standards are much higher than those expected of the average high school student and thus serve to exclude all but the most advanced or most motivated students. It is important to note that many of these states also combine high admissions standards with institutional decision-making power. For example, some states require students to meet eligibility criteria and be recommended for dual enrollment by school staff, or allow colleges to set admissions criteria in addition to the state criteria.

Given the attraction of both rigorous admissions standards and open access, six states¹⁴ attempt to combine the two. The mechanisms through which this occurs vary, but, in all six states, policies attempt to ensure the preparedness of dual enrollment

students without unduly excluding students from dual enrollment opportunities. In some cases, this entails two sets of admissions criteria. In others, such as in Ohio, students are required to be academically advanced in the subject of their dual enrollment course but not in other courses. So, for example, a student seeking to take a dual enrollment math course would need to have a 3.0 grade point average in his or her *mathematics* courses, but not his or her *English* courses. This ensures that a student who is ready for college-level work in one subject but who is weaker in another subject can still participate in dual enrollment in his or her strong subject area(s).

Florida is a state with two sets of admissions requirements, one for academic courses and another for technical courses. In order to participate in academic courses, students must have a 3.0 unweighted grade point average. To participate in a technical course, students must have a 2.0 unweighted grade point average. Students in both types of courses must also pass any proficiency exams required of regular college entrants. These dual requirements help ensure that students wishing to take a technical course or advance their skill set in a technical program are not prevented from pursuing occupational education at the postsecondary level. It also helps ensure that most students have access to some dual enrollment options, even if they are not ready to participate in an academic course at the postsecondary level. The flexibility exhibited by Ohio, Florida and other states with multi-tiered eligibility requirements encourages maximum participation in dual enrollment without

sacrificing the collegiate nature of dual enrollment courses or risking the failure of large numbers of high school students in college courses.

In sum, a majority of states that have dual enrollment policies address eligibility requirements. Approximately half of these states regulate the grade level of students in dual enrollment, with the majority requiring students to be in the 11th or 12th grade. About two-thirds of states with eligibility requirements set their own academic standards for dual enrollment participation. By and large, these states require a high degree of academic proficiency. It would seem, then, that of the states concerned with regulating the admission of students into dual enrollment, most limit the program to academically advanced students and/or upperclassmen.

Program Financing

Program financing is a significant concern for states. Given the complexity of education funding at the secondary and postsecondary levels generally, and with regard to dual enrollment in particular, it is impossible to give a detailed account of financing arrangements in this report. Further research should be conducted to more clearly explain the mechanisms supporting dual enrollment and the implications that various funding streams have on student access to, and participation in, dual enrollment programs.

Funding arrangements have implications for institutions and individuals. If students are expected to contribute financially, those from low-income families may be unable to

participate. If high schools lose money when their students leave to take courses elsewhere, they may be unwilling to encourage student participation. Likewise, if colleges are hurt financially when they enroll high school students, they may construct institutional barriers to participation or limit access to dual enrollment. Funding both high schools and colleges (sometimes called “double dipping”), however, requires the state to pay twice for the same student.

Funding dual enrollment programs actually entails two decisions: who pays the tuition, and how state ADA and FTE funding streams are directed.¹⁵ The first issue is, to some extent, more straightforward, as it addresses only the “on paper” costs of dual enrollment to the student and is only a small part of the overall funding of an institution. The second issue is much more complex, as it must take into account state funding streams for both secondary and postsecondary education and may potentially address significant portions of institutional funding. When the two issues are combined, state policies addressing program financing become extraordinarily complicated and varied.

To simplify the discussion, this paper addresses tuition and ADA and FTE funding streams separately, recognizing that the reality is more complex. However, a cursory discussion of funding mechanisms is a way to illustrate the possible funding streams states can use to promote or discourage dual enrollment participation.

Exhibit 8: Tuition

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
States with policy addressing tuition payments	30	See below for a list of states and specific characteristics.
■ Students pay	7	Alabama, Arkansas, California, Kansas, North Dakota, Oklahoma, South Dakota
■ Institutional decision	6	Arizona, Missouri, Montana, Texas, Virginia, West Virginia
■ Institutions pay	11	Colorado, Florida, Idaho, Iowa, Michigan, North Carolina, Ohio, Vermont, Washington, Wisconsin, Wyoming
■ State pays	6	Georgia, Illinois, Indiana, Maine, Minnesota, Utah

Tuition

Thirty of the 38 states with dual enrollment policies address tuition payments. In seven states,¹⁶ the students themselves are required to pay tuition, potentially limiting participation to those able to pay for it. Another six states¹⁷ stipulate that the participating institutions decide: the secondary and postsecondary schools may agree to pay students’ tuition, or they may agree to have students pay the tuition themselves. Although institutional arrangements can help alleviate the burden on students, they are vulnerable to changing financial circumstances. For example, Morest and Karp (2003) found that some schools covered students’ tuition until program growth made it too expensive to do so or until district priorities shifted, after which the schools shifted the financial burden to the students.

Allowing students to enroll without paying tuition may help low-income students participate. But it does not obviate the need for *someone* to pay (or, in the case of postsecondary institutions, forgo) tuition costs. In 11 states,¹⁸ this burden is placed on participating institutions. In some states, the high school is responsible for paying tuition, while in others, the postsecondary institution is expected to waive tuition costs. In other states, a combination is required, whereby both the secondary and postsecondary institutions pay part of the tuition costs, sharing the burden and ensuring that the students themselves are not responsible. It is important to note that in many of these arrangements, students do not pay tuition, but they still must cover student fees, books and transportation costs.

In North Carolina, for example, state policy specifies that students are exempt from tuition costs but not fees or book costs. The policy does not state who makes up for the lost tuition—whether the postsecondary institutions are expected to forgo tuition payments or if the secondary institutions are expected to pay dual enrollment students' tuition.

Some states use tuition payments to promote student achievement. In Iowa, the school district pays students' tuition, fees and books up to \$250 per course, unless the students fail their course. In that case, the student is responsible for all costs. Presumably, this arrangement motivates students to take their dual enrollment courses seriously. Additionally, Iowa does not require school districts to pay the tuition of dual enrollment

students who enroll in postsecondary courses full-time. In other words, if students choose to essentially leave the high school in favor of college, the high school is no longer responsible for their tuition expenses.

Finally, six states¹⁹ aim to make dual enrollment participation beneficial to students, secondary schools and postsecondary institutions by providing state funding for tuition. In this way, students are not required to pay (thereby enabling students from all economic backgrounds to participate), nor are institutions (thereby removing a disincentive to institutional participation). Indiana, for example, has a state-funded entity, the Postsecondary Enrollment Program Fund, that offers financial assistance to students enrolled in dual enrollment programs. In Maine, there are state subsidies for dual enrollment tuition, up to 50 percent of the costs of three credits per semester. It is not clear, however, who pays the other 50 percent of tuition costs.

Though state funding can ensure that dual enrollment is an attractive option for all stakeholders, it is a vulnerable way to fund the initiative. States under fiscal pressure may decide to drop their support, shifting the burden back to schools or students, or they may decide to eliminate the programs altogether. Such is the case in Massachusetts, a state with a long-standing dual enrollment program whose funding was cut due to budgetary pressures. Student tuition was paid for by the state, but, in October 2002, the Massachusetts Department of Education eliminated the funds. Though dual

enrollment continues in Massachusetts, it is now supported by private and foundation dollars, rather than by the state.

FTE and ADA Funding

The use of state ADA and FTE funds to support dual enrollment programs is complex and heavily dependent on state education funding streams in general. Given the strong role of the state in funding education, it is somewhat surprising that only 18 state policies outline dual enrollment funding streams. It is unclear how the other 20 states fund dual enrollment, though it is reasonable to assume that both high schools and colleges use dual enrollment students in their computation of ADA and FTEs.

As with tuition, ADA and FTE funding can be characterized as taking on one of four arrangements: high schools lose funds, colleges lose funds, both high schools and colleges lose funds, or neither institution loses funds. This last arrangement is often referred to as “double dipping” because states pay twice for the same student. Although this arrangement is somewhat contentious (Policymakers may have a hard time justifying it to their constituents.), it helps ensure that both secondary and postsecondary schools view dual enrollment as institutionally beneficial. Eight states²⁰ (or the majority of those whose policies specify funding mechanisms) doubly fund dual enrollment courses. In fact, in 1996, Illinois deliberately changed state policy to allow double-funding in order to promote student participation in dual enrollment programs.

Exhibit 9: FTE and ADA Funding

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
States with policy addressing FTE/ADA funding	18	See below for a list of states and specific characteristics.
■ Double-funding	8	Arizona, California, Idaho, Illinois, Minnesota, Missouri, Virginia, Wyoming
■ High schools lose funds	2	Texas, Washington
■ Colleges lose funds	1	Colorado
■ Both lose funds	4	Georgia, Michigan, North Carolina, Ohio
■ Partial or unclear funding policies	3	Indiana, Mississippi, Tennessee

In three states, double funding is prevented by requiring one institution to forgo state funding. In Texas and Washington, high schools lose their ADA funding when students enroll in dual enrollment courses; these students are not counted as high school students during their college course time. Colleges, however, are able to count dual enrollment students toward their FTE funding, with no restrictions. In contrast, Colorado colleges do not receive FTE funding for dually enrolled students engaging in two or fewer postsecondary courses. Colleges do receive FTE funding once students enter their third dual enrollment course.

Four states (Georgia, Michigan, North Carolina and Ohio) attempt to balance their funding so that they pay for student participation only once but do not require one institution to lose a disproportionate

amount of funding. In these states, both the high school and the college lose some, but not all, ADA and FTE funding when students participate in dual enrollment. In Ohio, for example, funding formulas are structured to determine state ADA and FTE funding based on the types of courses taken and number of hours students participate. Michigan gives high schools their complete ADA funding for dually enrolled students, but high schools are required to pay postsecondary institutions the lesser cost of the colleges' FTE funding or tuition resulting from students in dual enrollment courses. In this way, both institutions receive funding for dually enrolled students but not as much as they would receive if the state used a double funding system.

Finally, three states (Indiana, Mississippi and Tennessee) offer only partial guidance regarding funding. In these states, the policy specifies the dual enrollment funding for one institution but does not state what shall happen to funding at the other institution. For example, it is clear that high schools in Tennessee do not lose ADA funding when students enroll in dual enrollment courses, but the implications of dual enrollment for FTE funding at the postsecondary level are not stated.

As noted at the beginning of this section, funding streams for dual enrollment programs are extraordinarily complicated, and this report cannot completely articulate the many nuances found among state funding policies. It seems that tuition payments vary, with students bearing the burden more often than might be expected, given concerns about

access to dual enrollment and higher education generally. It also seems that, in many states, both secondary and postsecondary institutions receive funding for dual enrollment students, providing a strong incentive for program participation.

What is important to take away from this limited discussion is that funding can be a strong incentive or disincentive for participation, for both students and institutions. Policymakers seeking to expand dual enrollment participation should pay close attention to the implications of their funding streams and seek mechanisms that penalize the fewest stakeholders. They should also be attuned to the ways that budget constraints can limit state participation in dual enrollment funding.

Instructors

Twelve states²¹ have stipulations regarding instructors of dual credit courses, but the stipulations vary widely. For example, Georgia mandates that all instructional duties lie with the postsecondary institution, while Wyoming allows for any secondary teacher to teach a dual credit course. These are the policy extremes; the other states specify varying criteria for participating teachers.

Three states (Oklahoma, Oregon and Tennessee) allow dual credit courses to be taught by postsecondary faculty or by secondary school teachers that are approved by the college; the secondary teachers do not need to have the same credentials as the college faculty in order to receive approval. Six other states²² require that secondary teachers serving as dual credit course

Exhibit 10: Dual Enrollment Instructors

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
States with policy addressing dual enrollment instructors	12*	See below for a list of states and specific characteristics.
■ College approval of instructors	3	Oklahoma, Oregon, Tennessee
■ Dual enrollment instructors must have the same credentials as college instructors	6	Arizona, Missouri, North Dakota, Texas, Utah, Virginia
■ Dual enrollment instructors must participate in professional development	2	Michigan, Missouri
■ Outside regulatory agency	1	Virginia
■ Postsecondary instructors only	1	Georgia
■ Secondary or postsecondary instructor	1	Wyoming

*Numbers add to more than 12 because some states have multiple regulations

instructors have the same credentials as postsecondary faculty. The policies of Michigan and Missouri require that participating secondary school teachers participate in professional development, but the content and length are unspecified. Missouri policy details that participating secondary school teachers have the same credentials as postsecondary faculty, *and* that they must participate in professional development.

In one particular case, policy regarding dual credit instructors is determined by an outside regulatory agency. Virginia dual credit policies are influenced by the requirements of their region’s accrediting agency, the Southern Association of Colleges and Schools. Instructors in dual credit courses must meet the same minimum requirements used for community college faculty selection.²³ This example is informative because it points out that gaps in state policy may be deliberate not only because of issues pertaining to access and local control, but because other agencies may hold postsecondary institutions accountable, mitigating the need for state regulation.

The question of who is allowed to teach dual enrollment programs has implications for the perceived quality of the programs. Assurance that a student enrolled in a dual credit course is receiving college-level instruction is a key issue in the transferability of credit. Not all dually enrolled pupils matriculate to the postsecondary institution they attend as a dually enrolled student. Some postsecondary institutions may not consider a course that was taught by an individual without the same credentials or training as a traditional postsecondary instructor to be eligible for credit toward a degree. In such a situation, Georgia’s policy mandating instruction to be solely the responsibility of the postsecondary institution may be a wise path. Such a policy should do away with much of the skepticism regarding the level of the course work and credit. But it also places the burden of instruction squarely on the postsecondary institution, which may not have the resources or willing faculty to comply with such regulations.

The opposite situation in Wyoming—allowing secondary teachers to serve as instructors of dual credit with no stipulations or qualifying measures whatsoever—might be beneficial to dual enrollment programs because it does not overburden the faculty and resources of the postsecondary institutions, particularly if the institutions are not receiving full funding in the form of FTEs and/or tuition for dually enrolled pupils. However, courses taught by high school teachers might not be as widely accepted as college-level courses.

In sum, the ideal level of regulation of dual enrollment instructors is difficult to determine. Stringent regulation of dual enrollment instructors may limit the availability of dual enrollment courses, and therefore may serve as a disincentive for institutional participation in dual enrollment programs. Institutions must have the resources to recruit and provide professional development for teaching staff in order to implement such requirements. However, strong regulation of dual enrollment instructors may improve the level of rigor and quality (at least in the eyes of skeptics), thereby maintaining support for dual enrollment and perhaps easing students’ transfer of credit earned through dual enrollment.

Currently, less than a third of states have regulations regarding dual enrollment instructors. The lack of regulations may result from the resources required to effectively maintain and adhere to such regulations. However, devoting resources to instructor training and quality may be a worthwhile investment on the part of states and programs.

Exhibit 11: Location and Student Mix

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
States with policy addressing dual enrollment location	25	See below for a list of states and specific characteristics.
<ul style="list-style-type: none"> Dual enrollment must take place on the college campus 	3	Colorado, South Dakota, Vermont
<ul style="list-style-type: none"> Either high school or college location is permissible 	22	Arizona, Alabama, Arkansas, California, Florida, Idaho, Illinois, Massachusetts, Michigan, Minnesota, Missouri, North Carolina, North Dakota, New Jersey, Oklahoma, Oregon, Tennessee, Texas, Utah, Virginia, Washington, Wyoming
States with policies addressing student mix	8	See below for a list of states and specific characteristics.
<ul style="list-style-type: none"> Dual enrollment students must be mixed with regularly matriculated college students 	2	California, Ohio
<ul style="list-style-type: none"> Either mixed or high school-only dual enrollment courses are permissible 	6	Michigan, New Jersey, North Carolina, Oklahoma, Texas, Wyoming

Location and Student Mix

State policies commonly address program location and student mix, yet do not tend to dictate either. Language pertaining to the location of dual enrollment courses is included in the regulations of two-thirds of the states that have dual enrollment policy. Of the 25 states that address location, only three (Colorado, South Dakota and Vermont) require that dual enrollment courses take place on the campus of the postsecondary institution. The remaining 22²⁴ states stipulate that the classes may take place

at either the high school or the college. Language regarding student mix (whether or not dually enrolled students attend classes with traditionally enrolled college students) is included in eight states; two of these (California and Ohio) require that dual enrollment courses be mixed. The remaining states²⁵ mention that the classes may be either mixed or reserved for high school students only.

It seems that states are interested in addressing program location and student mix, as these factors may influence the perceived quality of dual enrollment. And yet, they are reluctant to regulate these elements. This may be the result of states' concerns regarding access to dual credit courses. Mandating the location of dual enrollment courses could indirectly limit the population of students who can participate. For example, if a dual enrollment course must be offered on the college campus, high school students who do not have their own means of transportation will find it difficult to participate.

Additionally, if dual credit classes are offered only at the high school, the mix of high school and traditional college students can be inadvertently affected by local or district rules regulating access to the campus. California specifically addresses this and other related issues by stating that all dual credit courses must be open to the public, published in the regular course listings bulletins, and, if offered at the high school, must take place during a time period that the high school campus is open to the general public.

Location and student mix can contribute significantly to the perceived rigor or quality of dual enrollment and sometimes can affect the ability of students to transfer their credit toward a degree at other institutions (cf. Clark, 2001; Johnstone and Del Genio, 2001). There may be some benefit, then, to requiring dual enrollment courses to be offered on a college campus and with regularly matriculated college students. Yet, such requirements potentially limit student access to dual enrollment. Perhaps, then, states are reluctant to legislate one program model over another, allowing institutions to decide which model is more appropriate for their program goals and student body instead.

Course Content

In an attempt to ensure the collegiate nature of dual enrollment courses, some states regulate instructional practices. They may decide that some courses (for example, physical education) are not eligible for dual enrollment, or they may seek to oversee the curriculum and content of dual enrollment courses. The policies of 13 states²⁶ contain stipulations on course content and/or student evaluation methods. Regulations may call for dual enrollment programs to limit course offerings; to seek college approval for courses and their content; or to use standardized college curricula, books, or exams regardless of location or instructor. In contrast, some states specify that they will impose no restrictions. Three states (Arizona, Missouri and Virginia) use a combination of regulatory methods.

Exhibit 12: Course Content

Program Feature	#	States
States with dual enrollment policy	38	Please see Exhibit 3 for a complete list of states with dual enrollment policy.
States with policies addressing course content	13*	See below for a list of states and specific characteristics.
<ul style="list-style-type: none"> Policy requires use of standardized curricula, books or exams 	2	Arizona, Missouri
<ul style="list-style-type: none"> College approval of courses 	6	Arizona, California, Missouri, North Dakota, Utah, Virginia
<ul style="list-style-type: none"> Limits on course offerings 	5	Arizona, Florida, Iowa, Minnesota, Virginia
<ul style="list-style-type: none"> State approval of courses 	3	Georgia, Kansas, Oregon
<ul style="list-style-type: none"> High school approval of courses 	1	Tennessee

*Numbers add to more than 13 because some states have multiple regulations

Although using standardized curricula, books, and exams would seem to be the most efficient way to ensure quality in course content without much additional effort on the part of the secondary or postsecondary institutions, analysis showed this method of regulation is not often employed. Only Arizona and Missouri require dual enrollment programs to use standardized college curricula, books and exams. These states' policies stipulate standardization in combination with other methods. In Arizona, state policy limits course offerings and requires that dual credit programs gain college approval for the course, in addition to standardization. Missouri state policy requires that programs have college approval for their courses in addition to standardization.

Virginia is the third state in which state policy employs a combination of regulatory methods in an attempt to provide quality course content. Virginia state policy combines limitations on course offerings with the mandate that dual enrollment programs receive college approval of the courses. There are three states (California, North Dakota and Utah) that require dual enrollment programs to gain college approval for the courses they offer.

The policies of three states (Georgia, Kansas and Oregon) require that dual enrollment programs get state approval for courses. Five states limit the courses that can be offered through dual enrollment programs. Limits on course offerings are stipulated in a number of ways, such as not allowing physical education and/or developmental courses to be offered as dual credit courses or by mandating that a dual credit course offering cannot be comparable to a course already offered by the school district the pupil attends. Tennessee is the only state with non-restrictive policy language, which allows for high school-based courses to be offered at the discretion of the public school superintendent.

California dual enrollment policy is an interesting case, because, although state policy specifically stipulates that the courses are required to be approved by the postsecondary institution, state policy on FTEs has implications that limit course offerings. California's dual enrollment policy stipulates that community colleges are not to receive FTEs for "physical education courses in excess of 5 percent of the district's total reported" FTEs (S.B. 338). Therefore, despite the fact

that California policy does not explicitly limit course offerings, other areas of the state statutes may have implications that result in postsecondary institutions “not approving” courses for dual credit that will ultimately cause them to lose money.

Such implicit course limiting was found in the analysis of the policies of many of the states. Stringent regulations placed on instructors, location and funding can all have implications that limit the courses a particular dual enrollment program offers. For example, state policies mandating dual enrollment instructors’ credentials implicitly limit course offerings by limiting the available pool of qualified teachers. As evidenced by the California policy on dual enrollment, funding issues could also implicitly limit the courses offered.

Although regulating course content may help maintain the college level of dual enrollment courses, less than one-third of states with dual enrollment policy have such requirements. It may be that quality controls exist outside of state policy—perhaps with regional accreditation boards—or that the lack of policy ensures institutional control of course content, pedagogy and evaluation. Or, policymakers may decide that such regulation is a tedious, expensive job that is too costly for the possible benefits.

CONCLUSION: RECOMMENDATIONS FOR POLICYMAKERS

This scan makes it clear that dual enrollment policies can vary along many dimensions.

State policy regulating dual enrollment ranges from non-existent to very detailed. Program structure is the least governed area, while student admissions and program finances are most often addressed by state policy. To some degree, this makes sense. States have a vested interest in ensuring that 1) their financial investment in dual enrollment is used wisely and 2) dual enrollment programs remain college-level and do not dilute the meaning of credit earned through state postsecondary institutions. States have less of an interest in promoting a specific model, as it seems possible to achieve program goals through a variety of structures. Moreover, states seem hesitant to legislate program structure, as this would threaten schools’ ability to control their program offerings and possibly threaten the integrity of educational institutions.

The goal of this report was to highlight various policies and mechanisms that states use to regulate dual enrollment programs and to highlight the ways that policies may shape the dual enrollment programs’ structure, content, and participation rates. The report emphasizes the many choices inherent in creating policies that address multiple elements of a state education system. More importantly, it offers policymakers seeking to create or modify dual enrollment regulations templates from which to draw. Finally, this report illustrates the many features of state dual enrollment policies and the ways that each element interacts with and influences other elements of policy.

In researching this report, the authors were continually struck by the difficult balancing

act states must engage in. There is a strong desire to promote access to dual enrollment for a broad range of students. Yet, there is also a need to maintain academic standards and ensure that only students ready for college-level work participate in college courses. To some extent, these two goals conflict. Likewise, states' desire to ensure that no stakeholder is deterred from participating in dual enrollment due to funding constraints must be balanced with states' need to ensure that dual enrollment does not become a drain on resources. There is an inherent tension between expanding student participation and limiting it that policies must recognize and address.

Additionally, the researchers noticed the implication that funding decisions may have for program and student participation. Particularly in states in which tuition payments are governed by institutional decisions or are the responsibility of the student, participation seems to hinge upon student ability to pay. In addition, when states set aside funding for dual enrollment programs, economic downturns or shifting priorities can lead to the elimination of state support, thereby placing the burden back on the schools and the students.

In thinking through the implications that state policies may have for programs and for students, and in studying the various ways that dual enrollment programs are structured, the authors offer the following recommendations to policymakers and program regulators.

Clarify program goals. Policies and regulations for dual enrollment that intend to offer

enrichment for academically sound students will differ from those addressing dual enrollment programs targeted at a wide range of students. Policies should follow program goals, rather than vice versa. For example, if high schools lose ADA funding or must pay students' tuition, they are unlikely to advertise dual enrollment opportunities to students. Such a system could inadvertently minimize student participation or limit participation to those students who are the most politically savvy and best understand the system. Such outcomes may make sense if program goals are to provide dual enrollment opportunities to only the most academically able but are contrary to attempts to open access to postsecondary education.

Identify funding mechanisms that meet the needs of all stakeholders. As discussed at some length, funding mechanisms, both in terms of ADA-and FTE-earning and in terms of tuition payment, may have important ramifications for student and institutional participation. Although earmarked state funds directed toward dual enrollment are an appealing way to finance dual enrollment programs, recent economic developments indicate that such funding may be unstable. Instead, policymakers might consider arrangements such as those used in North Carolina and Michigan, where high schools and colleges share the funding burden for dually enrolled students (just as they share the burden to educate those students). This seems a more equitable solution and one that ensures that economically disadvantaged students will not be excluded from dual enrollment programs because of their inability to pay.

Think through the implications of both minimal and detailed dual enrollment policies. Limiting dual enrollment regulation is one way to maintain institutional control over educational programming, and may be appealing to legislators seeking stakeholder support for dual enrollment. However, small-scale or not-very-detailed policies may create unanticipated consequences for legislators. For example, California’s dual enrollment program came under public scrutiny during the winter of 2003 when it was revealed that some colleges were increasing their enrollments by permitting high school sports coaches to list their team practices as a college physical education course. The colleges received additional funds for these “courses,” even though the practices did not contain any college coursework. Furthermore, the high school coaches were paid twice at taxpayer expense—once by their districts and again by the colleges. Vague policies may lead to similar unintended consequences. Of course, the opposite may also be true: policies that are too stringent may limit participation or prevent program innovation, thereby discouraging institutional participation.

Develop ways to ensure the rigor of dual enrollment courses. Dual enrollment, particularly when it is located at the high school, is often criticized for not offering students a true postsecondary experience. Policymakers must find ways to address this criticism and ensure that dual enrollment courses are more than watered-down college courses. Although some states seek to do this by regulating course offerings, requiring dual enrollment teachers to undergo professional

development or by requiring that high school students attend class with matriculated college students, such regulations are not common. Ensuring the quality of students’ dual enrollment experiences is important not only for the students themselves, but because it serves to maintain the integrity of postsecondary education throughout the state system. Dilution of quality may reflect poorly on postsecondary credit generally.

Consider the needs of students beyond academic course taking. Despite the attention paid to comprehensive and enhanced comprehensive programs in the education and grant-making communities, few state policies create comprehensive dual enrollment programs. Though such programs are not precluded by policy, they are not encouraged, either. Because creating comprehensive, and especially enhanced comprehensive programs, requires more resources than creating singleton programs, funding streams that provide only the minimum support for dual enrollment may inadvertently prevent programs from providing services such as counseling that can promote student success.

Meet the needs of students interested in technical courses as well as academic courses. Dual enrollment programs often target those students ready for academic course work at the college level. But many students, particularly those who find relevance and motivation in technical classes, may benefit from the career-related opportunities available in the postsecondary sector. Policymakers should support dual enrollment programs that meet the needs of these students as well. Otherwise, they risk turning dual enrollment into yet another

program for those at the top of the academic hierarchy, instead of a program that can meet the needs of many students. Some states have created mechanisms to promote technical as well as academic dual enrollment: Florida's dual entrance requirements are an example of this, as is Vermont's legislative focus on dual enrollment courses for technical students. Other states create barriers for technical students. Such barriers are seen in the exam requirements for dual credit earned in South Dakota technical colleges. One possible way to encourage broad participation in dual enrollment that is not yet common may be the creation of career and technical pathways that offer dual enrollment credit for both technical and academic courses.

State dual enrollment policies are incredibly varied. From this analysis, the ramifications of this variation are not wholly clear. Future research should focus on exploring the ways that state policy variation influences the implementation of and participation in dual enrollment programs at the local level. However, this report does provide a sense of the myriad ways to structure and regulate dual enrollment. As such, it may aid both federal- and state-level discussions regarding dual enrollment policies and practices.

METHODOLOGICAL APPENDIX

As noted, the data for this report include all publicly available state policies and regulations regarding dual enrollment programs. It is important to note that the definition of “state dual enrollment policies” used here is different from that used elsewhere, particularly a 2001 report conducted by Education Commission of the States. For this report, only regulations and legislation created by state government entities (such as state departments of education or statewide education coordinating boards) were included. The ECS report also included dual enrollment programs administered by state university systems. In other words, under the ECS definition, a state without any legislation or regulatory language but whose university system administers a dual enrollment program would have been considered to have a state policy. Such a state would not have policy according to the definition used in this report.

State statutes, regulations, and program information were coded according to the ten program criteria explored in the report. Validity was ensured in two ways. First, spot checks of the analysis were conducted by a senior researcher. Random states were coded twice in order to clarify that policies had been interpreted and categorized correctly. Only small discrepancies were found between the first and second codings; these discrepancies were resolved by a re-analysis of the legislative and regulatory language, enabling the researchers to reach consensus as to the proper interpretation of the regulations. Second, interpretations of policies were compared with the interpretations given in two other state policy reports—the 2001 ECS report discussed earlier and a similar one conducted by the Minnesota State College and University System

(www.internalauditing.mnscu.edu/PSEO/Citations.html). Although this approach was useful only for older policies, it did enable the researchers to clarify their interpretation of state policy language.

In addition to analyzing the program features supported by state policies and making across-state comparisons, researchers also identified emerging themes and issues that policymakers should be attentive to when crafting or modifying dual enrollment regulations. These themes and issues were identified through a “memoing” process, whereby the researchers interacted with the data and one another to develop and test hypotheses and emerging themes. During this process, the researchers wrote informal “thought pieces” clarifying their impressions of the data, identifying themes in the data and raising issues to be addressed in the final

report. These memos were shared and discussed by the researchers as a way to clarify and more fully develop their ideas. Many of the themes initially explored in these memos were incorporated into the conclusions section of the report.

Because the goal of this report was to describe policies, rather than explore their

impact, the analysis was necessarily limited. Because data collection did not include gathering participation rates or other quantitative information, conclusions were necessarily inferential. It was not possible—nor was it the intent—to determine the impact of policy decisions on dual enrollment participation or growth.

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ENDNOTES

1. For simplicity's sake, this paper refers to all programs that allow high school students to enroll in college courses and to receive both high school and college credit for doing so as "dual enrollment." Readers should take note, however, that this terminology varies among states and programs.
2. Credit-based transition programs enable students to take college courses and earn college credit while still in high school. Dual enrollment is one form of credit-based transition program; others include middle college high schools, International Baccalaureate, Advanced Placement and Tech-Prep programs.
3. Credit-in-escrow refers to an arrangement whereby students receive college credit for high school work only if they subsequently enroll in and complete additional courses at the postsecondary level.
4. For a more detailed description of each type of credit-based transition program, see Bailey and Karp (2003). Middle College High Schools offer high school students the chance to ease their transition from high school to college through small class sizes, close relationships with teachers, and developing familiarity with a college campus.
5. Early college high schools are small, autonomous schools that blend high school and college into a coherent educational program. They are designed so that all students can achieve two years of college credit at the same time as they are earning a high school diploma (within four to five years of entering 9th grade). For more information, see: <http://www.earlycolleges.org/>.
6. Alaska, Connecticut, Delaware, Hawaii, Louisiana, Nebraska, New Hampshire, New Mexico, New York, Pennsylvania, Rhode Island, and South Carolina do not have state policy addressing dual enrollment, although some of these states do have dual enrollment programs within their state university systems.
7. Additionally, one state (New Jersey) has policy addressing the enrollment of high school students in college courses—but leaves the status of these enrollments as dual credit up to the participating high schools. Regulations permit student enrollment in college courses but do not require the earning of both high school and college credit for those courses. For the purposes of this report, New Jersey is considered to have a dual enrollment policy, as their regulations govern programs offering high school students dual credit.
8. Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Indiana, Kentucky, Maine, Michigan, Minnesota, Nevada, Ohio, Oklahoma, South Dakota, Virginia, and Washington.
9. Kansas, Missouri, Mississippi, Oregon, Tennessee, Texas, Vermont, and Wyoming.
10. Arizona, Georgia, Nevada, North Carolina, Oregon, Utah, Virginia, and Washington.
11. Arizona, Georgia, Idaho, Indiana, Iowa, Montana, North Dakota, Oregon, Tennessee, Virginia, Washington, and Wisconsin.
12. Arkansas, California, Kansas, Kentucky, Montana, and North Dakota.

13. Alabama, Georgia, Idaho, Indiana, Missouri, Oklahoma, Tennessee, Virginia, and Washington.
14. Arizona, Florida, Maine, Massachusetts, Ohio, and Wisconsin.
15. ADA funding is the basic state financing scheme for secondary education. FTE funds are state funds directed toward postsecondary institutions. Generally, these two funding streams are considered distinct from each other, and it is possible to analyze ADAs and FTEs separately. However, because both ADAs and FTEs are the basic operating funds for institutions, they are considered together in this report. The key question in addressing ADA and FTE funding in relation to dual enrollment is the extent to which an institution loses its funding base when it participates in dual enrollment. In this regard, the distinction between FTEs and ADAs is not as important as the institutional impact of dual enrollment financing structures.
16. Alabama, Arkansas, California, Kansas, North Dakota, Oklahoma, and South Dakota.
17. Arizona, Missouri, Montana, Texas, Virginia, and West Virginia.
18. Colorado, Florida, Idaho, Iowa, Michigan, North Carolina, Ohio, Vermont, Washington, Wisconsin, and Wyoming.
19. Georgia, Illinois, Indiana, Maine, Minnesota, and Utah.
20. Arizona, California, Idaho, Illinois, Minnesota, Missouri, Virginia, and Wyoming.
21. Arizona, Georgia, Michigan, Missouri, North Dakota, Oklahoma, Oregon, Texas, Tennessee, Utah, Virginia, and Wyoming.
22. Arizona, Missouri, North Dakota, Texas, Utah, and Virginia.
23. Virginia is the only state to explicitly acknowledge accreditation requirements in its state policy. However, it is possible that other states and/or postsecondary institutions rely on accreditation requirements to ensure that instructors and course requirements adhere to standards of good postsecondary education practice.
24. Alabama, Arizona, Arkansas, California, Florida, Idaho, Illinois, Massachusetts, Michigan, Minnesota, Missouri, North Carolina, North Dakota, New Jersey, Oklahoma, Oregon, Tennessee, Texas, Utah, Virginia, Washington, and Wyoming.
25. Michigan, New Jersey, North Carolina, Oklahoma, Texas, and Wyoming.
26. Arizona, California, Florida, Georgia, Iowa, Kansas, Minnesota, Missouri, North Dakota, Oregon, Tennessee, Utah, and Virginia.

