Postsecondary Attainment in the Decade of Decision

The Master Plan for Tennessee Postsecondary Education 2015-2025

Tennessee Higher Education Commission
State statute charges the Tennessee Higher Education Commission (THEC) with developing a statewide Master Plan for the future development of public universities, community colleges, and colleges of applied technology, with input from the Board of Regents and the University of Tennessee Board of Trustees. The overriding function of the Plan is to direct higher education to be accountable for increasing the educational attainment levels of Tennesseans, while also: addressing the state's economic development, workforce development, and research needs; ensuring increased degree production within the state's capacity to support higher education; and using institutional mission differentiation to realize statewide efficiencies through institutional collaboration and minimized redundancy in degree offerings, instructional locations, and competitive research.

The Plan for 2015-2025 represents a departure from previous such documents in that it adopts a longer view than the typical five-year planning horizon that has characterized prior efforts. Rather, this Plan proposes that the ten year period 2015-2025 will represent a “decade of decision” for Tennessee postsecondary education in that: 1) the year 2025 has been identified as the “due date” for accomplishment of Governor Haslam’s Drive to 55 postsecondary attainment goal; 2) achieving that goal will require focus and persistence over an extended period; and 3) the goal and its attendant policy objectives are unlikely to change fundamentally over the next ten years.

The organizing framework of the 2015-2025 Plan is that it: 1) makes the case for continued, focused pursuit of the Drive to 55, Tennessee’s college completion policy agenda; 2) takes stock of important achievements to date since passage of the Complete College Tennessee Act (CCTA) of 2010; 3) calculates statewide and sector-specific degree and certificate production targets necessary for meeting the statewide goal; 4) recognizes four historically underserved (adults, low income, academically underprepared, nonwhite) student populations worthy of focused policy and programmatic attention throughout the coming decade; 5) identifies tools and strategies for serving these students; and 6) offers observations and recommendations intended to guide policymakers, system leaders, and campuses as they carry out their appropriate roles relative to Drive to 55 goal attainment.

Although this Plan places certificate training and undergraduate education at the center of the state’s college completion policy agenda for the decade 2015-2025, the state continues to acknowledge the critical need for academic programs of distinction at the graduate and professional level to fully address Tennessee’s economic development, workforce, and research needs.
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I. Introduction
Statutory Charge

Tennessee Code Annotated § 49-7-202(c)(1) directs the Tennessee Higher Education Commission to:

- Develop a statewide master plan for future development of public universities, community colleges and colleges of applied technology with input from the board of regents and the University of Tennessee board of trustees. The commission shall engage public universities, community colleges and colleges of applied technology for input during the creation of the master plan. The commission shall construct a statewide master plan that directs higher education to be accountable for increasing the educational attainment levels of Tennesseans. This master plan shall be reviewed and revised as deemed appropriate by the commission. This plan shall include, but not be limited to, the consideration of the following provisions:
  - Addressing the state’s economic development, workforce development and research needs;
  - Ensuring increased degree production within the state’s capacity to support higher education; and
  - Using institutional mission differentiation to realize statewide efficiencies through institutional collaboration and minimized redundancy in degree offerings, instructional locations and competitive research.

The 2010-15 Master Plan represented a shift in approach that Tennessee higher education master plans have historically taken by focusing on CCTA implementation and college completion. This new version of the Plan maintains that focus and builds upon it in the form of bringing the Drive to 55 to fruition. Furthermore, in a departure from the traditional five year window, the time horizon for this Master Plan is ten years as explained above. Also, including within the period covered by the Master Plan what is effectively the ‘due date’ for Tennessee’s goals — 55 percent educational attainment by 2025 — builds more accountability into the Master Plan and its recommendations.

The proposition that postsecondary education has replaced high school as the gateway to a middle class life has now evolved from proposition to principle. Widespread evidence exists that higher education affects economies and quality of life for states and individual citizens in myriad ways (e.g., earnings, health, civic engagement such as voting and volunteering, and innovative and resilient economies). With that foundation, Tennessee finds itself at a unique moment in this state’s postsecondary education history. The educational attainment and workforce development goals set by the Governor are bold, yet achievable. Importantly, these goals, which primarily animate higher education policy, are in fact embraced by agencies across state government. Those partnerships, and the alignment of policy and practice that result, are a key ingredient in the success of Tennessee’s goals.

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II. Key Accomplishments to Date
The last several years of higher education policy innovation have been intensely active in Tennessee. At the institutional, system, and state levels, policymakers and campus leaders have sought creative strategies and solutions to address student completion and workforce development. Some of these efforts began as stand-alone initiatives, but overall Tennessee has developed a coherent policy framework that operates across many different policy areas.

In 2008, Tennessee was one of only seven states nationwide to be awarded a Making Opportunity Affordable grant from Lumina Foundation. This competitive grant, later renamed the College Productivity Initiative, seeded policy reform focusing on adult learners and strengthening higher education finance policy. Some of the ideas that emerged from that grant work were incorporated into a major reform initiative passed by the Tennessee General Assembly in 2010, the Complete College Tennessee Act (CCTA). At the heart of the CCTA was the development of the nation’s first outcomes-based funding formula, which directly links state funding to institutional outcomes, rather than enrollments. The legislation also called for the development of transfer pathways, which established common pre-major courses of study that universities and community colleges would recognize and accept in transfer across the vast majority of academic majors at public universities. Following the FOCUS Act of 2016, which granted additional autonomy to six public universities (members of the TBR system), the State continues to focus on these transfer pathways as an avenue to student success.

These initial efforts were joined by reforms to Tennessee’s nationally-known Performance Funding program, now called Quality Assurance Funding (QAF), which provided a qualitatively focused funding program to complement the heavily quantitative outcomes-based formula. Remedial and developmental instruction has undergone dramatic changes with the introduction and expansion of the SAILS program (Seamless Alignment and Integration of Learning Support) and the co-requisite remediation model, developed by TBR, which embeds learning support systems directly into college credit courses, rather than funneling students into stand-alone remedial courses or sequences.

Many of these early policy efforts paved the way for the current Drive to 55 initiative, which clearly articulates Tennessee’s goal to increase the state postsecondary educational attainment rate to 55 percent by 2025, up from the current 40.7 percent (ACS, 2016). As a result, Tennessee began making significant progress in an array of other areas, such as becoming the first state in the nation to offer tuition-free community college to high school graduates, developing a suite of initiatives aimed at adult learners, and developing a reverse articulation and transfer system that allows students who have earned the hours for an associate’s degree to be awarded the credential, even though they may be enrolled at another institution. Workforce development programs connecting higher education, K-12, and industry were developed, key among them the Labor Education Alignment Program (LEAP).

While this overview is not exhaustive, the central takeaway is that higher education policy in Tennessee has seen significant reform and experimentation over the last several years. Properly evaluating the effectiveness of these efforts is critical, and scaling up those efforts that show potential is important. It is also vital to connect these efforts where feasible, as most of the policy problems Tennessee faces are multi-faceted. Many efforts are underway, and it is imperative that Tennessee continues to look for policy innovations that better promote student completion as well as workforce and workplace development.
III. The Drive to 55: A Framework for Current and Future Reform
At its core, the Drive to 55 is informed by two primary components: 1) arriving at a target number of postsecondary degrees and certificates to achieve the Drive to 55 goal by the year 2025; and 2) distributing those awards in such a way that is responsive to the needs of the statewide, regional, and local economies.

**Adequacy of Awards: How Many Credentials Are Needed?**

The Drive to 55 campaign intends to raise the proportion of the state's working-age population (age 25-64) with a college credential to 55 percent by the year 2025. The 2015-2025 Master Plan outlines the glide path toward this goal. This section describes the working assumptions that informed that analysis; describes the process for projecting future levels of undergraduate degree and credential production; and estimates the gap between current award production and that which will be required in the future.

**Background and Working Assumptions**

This section provides the background and the working assumptions of the methodology used.

1. The first working assumption is that the focus should be on the undergraduate credentials — pre-baccalaureate certificates, associate's degrees, and bachelor's degrees. The rationale for this decision is that graduate degrees require a prior bachelor's degree and do not affect conventional estimates of educational attainment as defined for Drive to 55 purposes.

2. A related assumption is that college *completers* should be counted, as opposed to postsecondary *awards* from Tennessee institutions. Focusing on award recipients and counting only the highest level of attainment avoids double-counting individuals who have received more than one credential. Therefore, duplicate observations of students were removed prior to making projections.

3. The third assumption accounts for various factors affecting the production of college credentials. The choice of predictors of postsecondary award production is driven by prior research, theory, and data availability. Undergraduate award projections and award production gap estimates are also dependent on secondary data projecting high school graduates and statewide population growth.

4. Finally, historical data on undergraduate degree completers over multiple years and across all institutional sectors are used to create reliable projections for the next ten years. Additionally, overall projections by award type lend themselves to projections for each of Tennessee's postsecondary sectors (e.g., community colleges, independent four-year, etc.). The latter may serve as a basis for the estimation of institutional shares in projected undergraduate award production by the appropriate governing or coordinating board.
Undergraduate Award Projections: 2015-2025

Credential production projections were calculated by award level (pre-baccalaureate certificates, associate’s, and bachelor’s degrees) and institutional sector. This section describes the methods and data used for these award projections.

Projecting future undergraduate awards required several steps:

1. First, historical data were collected across all institutional sectors from 2006 to 2014. Availability of reliable data for all institutional sectors determined the time period. The institutional sectors include Tennessee public universities; community colleges; Tennessee Colleges of Applied Technology (TCATs); TICUA member institutions and other independent non-profit postsecondary schools; and private non-profit, for-profit, and out-of-state institutions under the purview of THEC’s Division of Postsecondary Authorization (DPSA).

2. Multivariate linear regression was used as the primary method to project postsecondary awards over the next ten years. The key advantage of this method is its ability to predict future values of the outcome variables (number of credential recipients) based on a combination of independent variables used in the model. Another advantage of this approach is that it allows for by-sector estimates to precisely match the overall estimates. This characteristic of the linear model is important due to the need to project award production by credential and sector and keep these predictions within the constraints of the overall projections for Tennessee postsecondary education.

3. Projections of natural growth in credential production were estimated by award type and institutional sector, and by sector with all awards combined. Projections by award or sector add up to match the overall projections.

These award projections serve as the foundation for estimating the gap between natural growth and the growth needed to meet the Drive to 55 goal.

Estimating the Gap in Credential Production

Estimating the gap between current award production and that which will be required in the future is a multi-step process, based on data from various sources and several key assumptions.

1. To estimate the gap, two factors must be taken into account: a) the number of credentialed working-age individuals at the starting and finishing points of the projection period and b) the natural growth in award production.

2. To calculate the number of credentialed individuals needed to meet the Drive to 55 goal, one must first project the number of 25-64 years olds who will live in Tennessee in 2025 (see Table 1 on the following page). These data are available from population projections developed by the Boyd Center for Business and Economic Research (BCBER) at UT Knoxville. Based on these projections, Tennessee will require 1,978,283 residents with a postsecondary certificate, associate’s degree, or bachelor’s degree to boast 55 percent of working age adults with postsecondary credentials in 2025.
3. The gap estimation relies on the 2013 American Community Survey (ACS), which provides data on educational attainment. The ACS does not include certificate holders; thus, based on the findings of a BCBER study, we assume that four percent of Tennesseans hold a certificate from a postsecondary institution. Tennessee’s postsecondary educational attainment rate (certificates or higher) in 2013, therefore, was 37.8 percent, which translates into 1,294,249 individuals (Table 1).

4. To use 2013 as a starting point, it is necessary to include only Tennesseans who were 54 or younger in that year. The rationale for this is that this group will not “age out” of the workforce before 2025, and will be included in educational attainment estimates in 2025. Applying the same finding that four percent of residents will hold a postsecondary certificate, and adding this number to the ACS-estimated number of people with at least an associate’s degree totals 1,037,157 credentialed Tennesseans who will not age out of the workforce by 2025 (see Table 2).

5. The gap estimation also requires assumptions about interstate migration by educational attainment and natural mortality. Based on prior findings that Tennessee has a positive net migration at every level of educational attainment (including individuals with no college experience or credential), we assume the net migration of credentialed individuals to be zero. In other words, it was conservatively assumed that over the next ten years, the proportion of Tennessee residents with college credentials, as a result of migration patterns, will remain unchanged. For the purposes of these estimations, due to data limitation, mortality was also assumed to be zero.

Baseline number (2013) of working age adults with college credentials: 1,294,249 or 37.8% of working-age adults in Tennessee.

Number of working age adults with a college credential needed to reach the 2025 Drive to 55 goal: 1,978,283 or 55% of working-age adults in Tennessee.

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1 Source: American Community Survey — 2013, One-year estimates.
The difference between the number of credentialed individuals in 2025 and credentialed individuals below the age of 54 in 2013 minus the number of graduates in 2014 (69,817 awards) gives the overall number of credentials needed to meet the Drive to 55 goal. This number is estimated at 871,309 awards, which translates into 79,210 total credentials needed annually between 2015 and 2025 (Table 2 below). It should be noted that this number includes both the natural growth over the next ten years and the gap between the natural growth and the needed growth.

Table 2. Number of Degrees Needed to Meet the Drive to 55 Goal

<table>
<thead>
<tr>
<th>Number of credentialed residents in 2013 who will not age out by 2025</th>
<th>1,037,157</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holders of an associate's degree or higher</td>
<td>940,650</td>
</tr>
<tr>
<td>Certificate holders (4%)</td>
<td>96,507</td>
</tr>
<tr>
<td>Needed number of credentialed individuals in 2025</td>
<td>1,978,283</td>
</tr>
<tr>
<td>Number of credentials awarded in 2014</td>
<td>69,817</td>
</tr>
<tr>
<td><strong>Number of credentials needed to meet the Drive to 55 goal</strong></td>
<td><strong>871,309</strong></td>
</tr>
<tr>
<td>Annual needed growth to meet the Drive to 55 goal</td>
<td><strong>79,210</strong></td>
</tr>
</tbody>
</table>

Table 3 below demonstrates two possible future scenarios: (1) the gap between the needed growth and the projected natural growth in award production for the period from 2015 to 2025; and (2) the gap between the needed growth and award production at the current (2014) level. The latter assumes zero natural annual growth, meaning that each year Tennessee would continue to produce awards at the level of 2014 (69,817 credentials). Believing the first scenario to be more realistic, we estimated that Tennessee needs to produce 77,646 additional degrees—that is, above the natural growth trajectory—to meet the Drive to 55 goals by 2025.

Table 3. Overall Gap between Credential Growth Needed for Drive to 55 and Projected Natural Growth in Credential Production

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Needed growth</strong></td>
<td>79,210</td>
<td>158,420</td>
<td>237,630</td>
<td>316,840</td>
<td>396,050</td>
<td>475,260</td>
<td>554,469</td>
<td>633,679</td>
<td>712,889</td>
<td>792,099</td>
<td>871,309</td>
</tr>
<tr>
<td><strong>Natural growth</strong></td>
<td>70,226</td>
<td>138,975</td>
<td>209,466</td>
<td>280,460</td>
<td>351,832</td>
<td>422,456</td>
<td>493,167</td>
<td>564,567</td>
<td>638,467</td>
<td>715,007</td>
<td>793,663</td>
</tr>
<tr>
<td>Best-case scenario</td>
<td>72,581</td>
<td>143,498</td>
<td>217,189</td>
<td>291,540</td>
<td>366,399</td>
<td>439,809</td>
<td>513,227</td>
<td>587,737</td>
<td>666,759</td>
<td>750,685</td>
<td>838,581</td>
</tr>
<tr>
<td>Worst-case scenario</td>
<td>67,870</td>
<td>134,452</td>
<td>201,743</td>
<td>269,380</td>
<td>337,266</td>
<td>405,103</td>
<td>473,106</td>
<td>541,397</td>
<td>610,174</td>
<td>679,328</td>
<td>748,744</td>
</tr>
<tr>
<td><strong>Gap in awards</strong></td>
<td>8,984</td>
<td>19,445</td>
<td>28,164</td>
<td>36,380</td>
<td>44,218</td>
<td>52,804</td>
<td>61,302</td>
<td>69,112</td>
<td>74,422</td>
<td>77,092</td>
<td>77,646</td>
</tr>
<tr>
<td>Continued production at 2014 level</td>
<td>69,817</td>
<td>139,634</td>
<td>209,451</td>
<td>279,268</td>
<td>349,085</td>
<td>418,902</td>
<td>488,719</td>
<td>558,536</td>
<td>628,353</td>
<td>698,170</td>
<td>767,987</td>
</tr>
</tbody>
</table>
871,309 credentials need to be produced between 2015 and 2025 to meet the Drive to 55 goals. This translates to 79,210 credentials produced annually.

Tennessee needs to produce 77,646 additional degrees—that is, above the natural growth trajectory—to meet the Drive to 55 goals by 2025.

Figure 1 provides a graphic representation of the information in Table 3.

Figure 2 breaks down total award production, past and future, by institutional sector. It includes historical data and projections, combining all certificates/diplomas and undergraduate degrees for each sector. Public universities are represented with separate counts for TBR and UT institutions. Taken together, university production over time rivals that of the proprietary institutions. The remaining sectors comprise community colleges, TCATs, and Tennessee non-profit institutions.
To be most useful to academic system planners, the overall gap between the natural growth and needed growth estimated above must be broken down by institutional sector. This approach turns the projected gap into a useful tool guiding sectors and institutions in their academic and resource planning.

Table 4 presents the accumulating gap in award production by five main institutional sectors anticipated between the present and the year 2025. The second column (Past Share) shows historical share of each sector based on available data from 2006 to 2014. Based on assumed changes in these historical shares due to 1) fluctuations observed in past data and 2) recent policy reforms and initiatives in Tennessee, the Future Share column presents the anticipated institutional shares over the next ten years. Applying these shares to the cumulative gap for the period 2015 to 2025 produces the necessary number of additional credentials needed from each sector. The last column in Table 4 (2025) represents the fully accumulated number of additional credentials for each institutional sector for the entire planning period.
Alignment of Awards: What Kinds of Credentials Are Needed?

For all its complexity, addressing the question of how many college degrees and other postsecondary credentials are necessary over the next decade to meet the educational attainment demands of the Drive to 55 is more straightforward than addressing the question of the manner in which those credentialed individuals should be distributed across the state. Several agencies or policy entities regularly undertake studies or maintain lists of the occupational fields that will have the most openings requiring a level of postsecondary education over some future period, or occupations having the highest (or lowest) supply-to-demand ratio, providing an indication of how competitive (or not) the Tennessee labor market appears to be for certain occupations.

While such studies and lists are prevalent, the inconvenient fact remains that some rather stunning examples of occupational over- and under-supply still exist, and they have for some time. Education and training programs for most of Tennessee’s most critically undersupplied occupational areas are offered by some public or independent educational provider in this state, however, the problem is that insufficient numbers (as indicated by labor market analyses) enroll in them.

Surely, at least part of the reason for this mismatch between postsecondary outputs and the labor market demands of the state economy resides in a lack of awareness on the part of certain postsecondary consumers. Just as surely, however, the uneven supply to the state’s workforce across critical need occupations must say something about our lack of ability to dictate, control, or persuade, through state policy, the preferences and choices of students who are often in their late teens or early twenties.

Making progress toward better alignment of postsecondary education and training programs and graduates with the oft-changing demands of workforce and economic (or workplace) development involves answering a set of inter-related research questions such as, “What are the industries in which knowledge workers are and will be needed? In what particular occupations will those industries most need employees? In what regions of the state? At what award level?”

Also problematic is the widely-recognized but difficult question of linking education and training programs with the occupations to which they might lead. The answer is quite straightforward in certain disciplines or occupational fields. In others, a connection is less direct if it exists at all.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Past Share</th>
<th>Future Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>28.9%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Community colleges</td>
<td>12.1%</td>
<td>15.1%</td>
</tr>
<tr>
<td>TCATS</td>
<td>9.3%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Not-for-profit schools</td>
<td>17.5%</td>
<td>17.5%</td>
</tr>
<tr>
<td>DPSA schools</td>
<td>32.3%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Total, all sectors</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4. Cumulative Gap in Total Credential Production as Dictated by Drive to 55 Compared to Estimated Natural Growth 2015-2025, by Postsecondary Sector
Given the aforementioned challenges in aligning postsecondary supply with labor market demand, the following policy thoughts are offered in hopes of casting light on the path forward:

1. Begin by focusing on the most glaring skills gaps that exist in the Tennessee economy rather than focusing on targeting a one-to-one supply-to-demand ratio in all occupational and training areas;

2. From the skills gaps identified, work backward to groups of related occupations (or “meta-occupations”) requiring similar sets of skills;

3. Take inventory of all education and training programs in Tennessee, public and independent, that are related on the basis of the skills they provide to graduates (one might think of these as “meta-majors”);

4. Create a cross-walk of meta-majors to meta-occupations; and

5. Map visually the above relationships: meta-occupations, meta-majors, the institutions in which these programs reside, and the labor markets they serve.
IV. Focus Populations: The Key to Drive to 55 Success
The Drive to 55 is an attainment agenda for all Tennesseans. An individual’s desire for a better quality of life, upward mobility, and economic competitiveness in the rapidly changing global economy knows no demographic or socioeconomic bound. Yet, as with the 2010-2015 Plan and its associated outcomes-based funding formula and Quality Assurance Funding (formerly Performance Funding) program, there are certain student populations that warrant special focus by the state and its postsecondary institutions due to their history of underrepresentation at the postsecondary level. Additionally, students who enroll from these populations may find they face unique risks and challenges in college, as do the institutions that serve them. Producing a credentialed completer from a focus population may mean greater cost, more time, and some inherent risk for the student and the institution. Yet, due to these students’ critical importance to the economic future of the state, their full participation in the Drive to 55 is essential.

This Plan first identifies three groups of individuals as focus populations for the outcomes-based formula, the Quality Assurance Funding program, and other targeted initiatives. Adult learners and low income students received special consideration in the 2011-2015 formula, via a 40 percent funding “premium,” and this Plan recommends continuing that premium for students from those populations. Additionally, academically underprepared students, which were not targeted in the 2011-2015 formula, are recommended for special consideration in the 2016-2020 formula, also at the 40 percent level.

Furthermore, the outcomes-based formula should recognize and reward the singular challenge taken on by institutions serving students who appear in two or more focus populations.

**Adult Learners (page 19)**
The Drive to 55 is not achievable by just focusing on college enrollment among recent high school graduates. 900,000 adult Tennesseans with some college but no degree represent the “sleeping giant” that must be an active part of the Drive to 55. The Master Plan recommends making adult learners a continuing focus of the outcomes-based funding formula, the Quality Assurance Funding program, and other targeted college completion initiatives.

**Low Income Students (page 21)**
Historically, low income students have been at special risk of both not enrolling in college or, if they do enroll, not completing college. At particular risk are low income students who start but don’t finish a degree and are at risk of eventual loan default. Enrollment and completion rates are increasing, though, and the number associate’s and bachelor’s degrees earned has increased every year since the implementation of the outcomes-based funding formula.

**Academically Underprepared Students (page 22)**
Students who enter college academically underprepared have often been relegated to remedial or developmental courses. The more remedial and developmental courses a student takes, the less likely he or she is to complete a degree or graduate within the recommended length of time. Recent programs, such as SAILS, have begun to take a proactive approach to early interventions for academically underprepared students.
Additionally, we focus on the attainment levels of and degree projections for nonwhite (defined as African American and Latino) students in Tennessee. While not included as a focus population in the outcomes-based funding formula, it is imperative that the state of Tennessee works to decrease gaps in degree attainment along racial lines, ensuring a level playing field and equal opportunity for all Tennesseans to enter and succeed in the workforce, following credential receipt.

**African American and Latino Students (page 25)**

_Historically, African American and Latino students have been more likely than their white peers to not enroll in college or, if they do enroll, persist and complete at lower rates. While completion rates of Latino students have increased over the past few years, the enrollment and completion rates of African American students continue to lag behind their white peers, perpetuating long-seen equity gaps across the state and nationally with regard to higher education attainment._

Data and projections for African American and Latino students will be presented following the three aforementioned outcomes-based funding formula focus populations.

**Adult Learners**

The 55 percent postsecondary attainment goal is not possible without the successful participation of adult learners in Tennessee postsecondary education. The Drive to 55 is not achievable merely by improving Tennessee public high school graduation rates (already among the highest in the nation), increasing recent high school graduates’ participation in postsecondary education, or improving their college progression and graduation rates. While some improvement is possible and desirable across all these dimensions, the some 900,000 adult Tennesseans having some college but no degree represent the “sleeping giant” that must awakened in order for the Drive to 55 to be realized. It is for this reason that this Plan recommends making adult learners a continuing focus of the outcomes-based formula, the Quality Assurance Funding program, and other targeted college completion initiatives.

As shown in Figure 3 below, the number of degrees and certificates earned by adult learners increased noticeably in the early years following implementation of the 2011-15 formula but turned back down from 2012-13 to 2013-14.
Figure 3. Public Postsecondary Awards for Adult Students, 2009-10 through 2013-14

Notes: Adult students are defined as those aged 25 or above at the time of the award. Definitional issues surrounding certificates in the early years of the new outcomes-based funding formula led to over-reporting of these students at the certificate level in academic years 2010-11 and 2011-12.
Low Income Students

Low income students are not only at special risk for college completion; they may have particular difficulty coming to a decision to enroll in the first place. Low income students may work or have additional responsibilities at home, putting them on an economic edge where any change in family circumstances or makeup may upset the student’s financial picture and necessitate putting college on the back burner. When that happens, students may decide to stop out and eventually dropout. Low-income students may be averse to taking out student loans for college attendance for fear of graduating with a load of debt beyond their ability to repay. At particular risk are students who borrow and do not finish their postsecondary program — such students are at particular risk for eventual loan default.

As shown in Figure 4 below, the number of postsecondary awards earned by low income students has increased every year at the associate’s and bachelor’s degree level since implementation of the outcomes-based funding formula; and, save for a definitional issue in the formula relative to certificates early in the funding cycle, have increased or held steady at the certificate level.

Figure 4. Public Postsecondary Awards for Low Income Students, 2009-10 through 2013-14

Notes: Low income students are defined as those who were eligible for the need-based federal Pell Grant at any time during their college careers. Definitional issues surrounding certificates in the early years of the new outcomes-based funding formula led to over-reporting of these students at the certificate level in academic years 2010-11 and 2011-12.
**Academically Underprepared Students**

In years past, academically underprepared students were seen largely as the responsibility of the K-12 system, or they were relegated to taking one or more non-credit remedial or developmental courses, where success rates in individual courses were low, and completion of all assigned developmental sequences was lower still. This frustrating scenario represented increased costs to students, institutions, and the state, which “paid twice” for offering the same instruction to affected students more than once, and in some cases several times. It also lowered the likelihood of degree completion for remedial and developmental students; and for those students who did graduate, it lengthened their time to degree.

Fortunately, in recent years, Tennessee has taken a more enlightened and proactive approach, first by offering Bridge Math during the senior year of high school via the Seamless Alignment and Integrated Learning Support (SAILS) program, which began at Chattanooga State Community College and is now being scaled up statewide. Students who successfully complete the program are ready to take a credit-bearing college math course, saving them time and money while accelerating their path to graduation.

At the postsecondary level, roughly 60 percent of students entering Tennessee Board of Regents (TBR) institutions have math, reading, or writing skills that are insufficient to enable them to successfully complete their degree. The traditional approach for these students has been to have them begin their studies in a pre-college class to prepare them for the credit-bearing classes to come later. Under the former approach, success rates in individual courses were low, and student completion of an entire required sequence of remedial and developmental course sequence was rarer still.

Recent work in TBR and elsewhere has shown that students are able to have far greater success in these critical areas if they begin in an appropriate credit-bearing class, and are required to attend supplementary instruction. This “co-requisite” model of instruction is specifically designed to aid students’ understanding of the material and help them succeed in the credit-bearing class. Tennessee Board of Regents institutions plan to move to this structure of pedagogy.

As Figure 5 indicates, degree growth among academically underprepared students has been modest to date. However, the recent developments described above point to greater potential for students who enter postsecondary education underprepared to complete their programs of study. For this reason, this Master Plan adds underprepared students (defined as students entering with an ACT composite score of 18 or lower) to the list of focus populations critical to achievement of the Drive to 55.
Academically underprepared students are defined as those students with an ACT composite score of 18 or below. Definitional issues surrounding certificates in the early years of the new outcomes-based funding formula led to over-reporting of these students at the certificate level in academic years 2010-11 and 2011-12.

Taken together, the three focus populations identified above — adult learners, low income students, and academically underprepared students — represent much of the degree and credential growth that must occur in order for Tennessee to succeed in reaching the postsecondary educational attainment goal articulated by the Drive to 55. Table 4, on the following page, demonstrates that growth in the numbers of certificates and degrees earned by students in all three focus populations has been encouraging, but it represents a base that the Tennessee postsecondary community will need to build and expand on in the years ahead. Data are shown from the last five years for which data were available.
### Table 4. Public Postsecondary Awards for Students in Focus Populations, 2009-10 through 2013-14

#### Pell-eligible students

<table>
<thead>
<tr>
<th>Award level</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>6,396</td>
<td>7,708</td>
<td>7,657</td>
<td>7,377</td>
<td>7,463</td>
<td><strong>36,601</strong></td>
</tr>
<tr>
<td>Associate's</td>
<td>4,906</td>
<td>5,675</td>
<td>6,527</td>
<td>6,720</td>
<td>6,714</td>
<td><strong>30,542</strong></td>
</tr>
<tr>
<td>Bachelor's</td>
<td>7,775</td>
<td>8,738</td>
<td>9,805</td>
<td>10,647</td>
<td>10,946</td>
<td><strong>47,911</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19,077</td>
<td>22,121</td>
<td>23,989</td>
<td>24,744</td>
<td>25,123</td>
<td></td>
</tr>
</tbody>
</table>

#### Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm. college</td>
<td>5,917</td>
<td>6,991</td>
<td>8,230</td>
<td>8,309</td>
<td>8,373</td>
<td><strong>37,820</strong></td>
</tr>
<tr>
<td>University</td>
<td>7,912</td>
<td>8,936</td>
<td>10,039</td>
<td>10,919</td>
<td>11,190</td>
<td><strong>48,996</strong></td>
</tr>
<tr>
<td>TCAT</td>
<td>5,248</td>
<td>6,194</td>
<td>5,720</td>
<td>5,516</td>
<td>5,560</td>
<td><strong>28,238</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19,077</td>
<td>22,121</td>
<td>23,989</td>
<td>24,744</td>
<td>25,123</td>
<td></td>
</tr>
</tbody>
</table>

#### Adult students

<table>
<thead>
<tr>
<th>Award level</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>5,779</td>
<td>7,019</td>
<td>6,601</td>
<td>6,209</td>
<td>5,988</td>
<td><strong>31,596</strong></td>
</tr>
<tr>
<td>Associate's</td>
<td>4,304</td>
<td>4,943</td>
<td>5,482</td>
<td>5,604</td>
<td>5,432</td>
<td><strong>25,765</strong></td>
</tr>
<tr>
<td>Bachelor's</td>
<td>6,254</td>
<td>6,403</td>
<td>6,826</td>
<td>7,307</td>
<td>6,985</td>
<td><strong>33,775</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16,337</td>
<td>18,365</td>
<td>18,909</td>
<td>19,120</td>
<td>18,405</td>
<td></td>
</tr>
</tbody>
</table>

#### Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm. college</td>
<td>5,501</td>
<td>6,462</td>
<td>7,324</td>
<td>7,478</td>
<td>7,155</td>
<td><strong>33,920</strong></td>
</tr>
<tr>
<td>University</td>
<td>6,446</td>
<td>6,677</td>
<td>7,120</td>
<td>7,644</td>
<td>7,248</td>
<td><strong>35,135</strong></td>
</tr>
<tr>
<td>TCAT</td>
<td>4,390</td>
<td>5,226</td>
<td>4,465</td>
<td>3,998</td>
<td>4,002</td>
<td><strong>22,081</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16,337</td>
<td>18,365</td>
<td>18,909</td>
<td>19,120</td>
<td>18,405</td>
<td></td>
</tr>
</tbody>
</table>

#### Low ACT scoring students

<table>
<thead>
<tr>
<th>Award level</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>432</td>
<td>495</td>
<td>594</td>
<td>624</td>
<td>697</td>
<td><strong>2,842</strong></td>
</tr>
<tr>
<td>Associate's</td>
<td>1,716</td>
<td>1,791</td>
<td>1,882</td>
<td>1,936</td>
<td>2,014</td>
<td><strong>9,339</strong></td>
</tr>
<tr>
<td>Bachelor's</td>
<td>2,423</td>
<td>2,461</td>
<td>2,415</td>
<td>2,673</td>
<td>2,710</td>
<td><strong>12,682</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,571</td>
<td>4,747</td>
<td>4,891</td>
<td>5,233</td>
<td>5,421</td>
<td></td>
</tr>
</tbody>
</table>

#### Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm. college</td>
<td>2,107</td>
<td>2,239</td>
<td>2,434</td>
<td>2,513</td>
<td>2,656</td>
<td><strong>11,949</strong></td>
</tr>
<tr>
<td>University</td>
<td>2,464</td>
<td>2,508</td>
<td>2,457</td>
<td>2,720</td>
<td>2,765</td>
<td><strong>12,914</strong></td>
</tr>
<tr>
<td>TCAT</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td><strong>0</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,571</td>
<td>4,747</td>
<td>4,891</td>
<td>5,233</td>
<td>5,421</td>
<td></td>
</tr>
</tbody>
</table>
African American and Latino Students

Per the United States Census American Community Survey (ACS) of 2016, 40.7 percent of working-age (25-64) Tennesseans hold a postsecondary credential. However, nonwhite residents of Tennessee, as is the case throughout the United States, have degree attainment rates substantially lower than their white peers. While 37.2 percent of white Tennesseans hold a postsecondary certificate or higher, only 27.8 percent of African Americans and 18.5 percent of Latinos hold such degrees. These gaps of 9.4 and 18.7 percentage points, respectively, reflect the imperative to emphasize and support degree attainment among African American and Latino Tennesseans. Table 5 displays this below:

Table 5. Educational Attainment and Gaps, by Race (ACS, 2016)

<table>
<thead>
<tr>
<th>Current attainment (2016 ACS)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>40.70%</td>
</tr>
<tr>
<td>White</td>
<td>37.20%</td>
</tr>
<tr>
<td>African American</td>
<td>27.80%</td>
</tr>
<tr>
<td>Latino</td>
<td>18.50%</td>
</tr>
<tr>
<td>White – African American gap</td>
<td>9.40%</td>
</tr>
<tr>
<td>White - Latino gap</td>
<td>18.70%</td>
</tr>
<tr>
<td>African American - Latino gap</td>
<td>9.30%</td>
</tr>
</tbody>
</table>

Further, African American and Latino students comprise only 27.4 percent of student headcount across public Higher Education in Tennessee; these students must be encouraged, informed, and supported to enroll in the best higher education option for their professional goals. Gaps in postsecondary completion also exist. Of those students who enrolled for the first time in Fall 2010, only 29.7 percent of African American students graduated within 6 years; 41.7 percent of Latino students graduated in the same time frame. This is compared to 47.9 percent of white students, and an overall statewide graduation rate of 43.6 percent.

With support from the Lumina Foundation, the Tennessee Higher Education Commission is working with stakeholders at the state-level and supporting institutions at the campus-level to intervene strategically to support African American and Latino students to and through degree completion. At the state level, Tennessee has set a goal that African American and Latino students will comprise at least 25 percent of annual growth toward the statewide Drive to 55 goal, and will comprise at least 5 percent of the total growth needed to reach 55 percent attainment by the year 2025. In real numbers, this is 38,000 additional nonwhite Tennesseans with a degree in the next four years (the Lumina Foundation grant work timeline), and over 50,000 additional nonwhite Tennesseans by the year 2025.

At the campus-level, institutions are working to strategically implement evidence-based best practices to recruit, enroll, retain and graduate African American and Latino students to and from their campuses. As these initiatives are consistently monitored and evaluated, campus leaders and staff are working hard each day to support nonwhite students. Examples of these best practices include expanded Summer Bridge programs, targeted mentoring relationships (i.e., pairing African American male students with African American males in their communities), text message nudging initiatives, residential learning communities, and increasing familial engagement through campus programming.
V. Available Policy Tools and Strategies
The challenges facing Tennessee in the Decade of Decision are many and daunting, yet the state’s postsecondary community, its affiliates, and its allies are not without tools and strategies to assist the state in meeting the goal of 55 percent adult postsecondary attainment by the year 2025.

**Drive to 55**

With his Drive to 55 college completion agenda, Tennessee Governor Bill Haslam challenged the Volunteer State with a critical new mission — not just a mission for higher education, but a mission for workforce and economic development — a drive to reduce unemployment; to become more economically innovative, resilient, and competitive; and to improve quality of life of Tennesseans across the state. The core components of the Drive to 55 are the Tennessee Promise, Tennessee Reconnect, and Tennessee LEAP initiatives.

**Tennessee Promise**

The Tennessee Promise is a scholarship and mentoring program focused on increasing the number of students who attend and complete college in Tennessee. It provides students a last-dollar scholarship, meaning the scholarship will cover tuition and fees not covered by the Pell grant, the HOPE scholarship, or state student assistance funds. Students may use the scholarship at any of the state’s 13 community colleges, 27 colleges of applied technology, or other eligible public and independent institutions offering an approved associate’s degree program.

While removing the financial burden is key, a critical component of Tennessee Promise is the individual guidance each participant receives from a mentor who assists the student as he or she navigates college application and enrollment processes. This is accomplished primarily via certain mandatory meetings and the consistent communication students must maintain with their mentors to remain eligible for the program. In addition, Tennessee Promise participants must complete eight hours of community service per term enrolled and maintain satisfactory academic progress at their institution.

**Tennessee Reconnect**

Tennessee Reconnect is the Drive to 55 initiative to help more adults complete a postsecondary degree or credential. Some 900,000 adults with some college but no degree reside in the state, and it will be impossible to achieve the mission of the Drive to 55 without re-engaging these students and helping them finish their degree or certificate. As part of Tennessee Reconnect, all Tennessee adults can now attend and earn a diploma or certificate at any of our 27 Tennessee Colleges of Applied Technology (TCATs) completely free of tuition and fees.

**Tennessee LEAP**

The Labor Education Alignment Program (LEAP) helps ensure that Tennessee’s postsecondary institutions are producing the skills and credentials that employers in the state actually need. The objective of Tennessee LEAP is to eliminate skills gaps across the state in a proactive, data-driven, and coordinated manner by encouraging collaboration across education and industry and by utilizing regional workforce data.
The Complete College Tennessee Act of 2010

In January 2010, Tennessee passed the Complete College Tennessee Act (CCTA), a comprehensive reform agenda seeking to transform public higher education through changes in academic, fiscal, and administrative policies at the state and institutional level. At the center of these reforms was the need for more Tennesseans to be better educated and trained, while also acknowledging the state's diminished fiscal capacity to support higher education. At the heart of the CCTA was the new Public Agenda for Tennessee Higher Education that established the direct link between the state's economic development and its educational system.

The primary state policy levers for addressing the state's educational needs were identified as a new funding formula, which incorporated student and institutional outcomes in lieu of enrollment; a recasting of the Quality Assurance Funding program (formerly known as Performance Funding); and the establishment of institutional mission statements or profiles, which distinguished each institution by degree level, program offerings, and student characteristics.

Articulation and Transfer Provisions

Universally Transferable Common General Education 41-hour Core

As required by the CCTA, all public community colleges and universities now offer and accept in transfer a common set of courses in its entirety or by completed general education subject field (such as physical sciences, social sciences, humanities, etc.).

Universally Transferable 19-hour Pre-major Pathways

As required by the CCTA, all public community colleges and universities honor transfer for 19-hour pre-major paths in 38 baccalaureate degree majors (history, agriculture, civil engineering, psychology, etc.). All community colleges and universities have agreed on the lower division course requirements fulfilling an AA/AS area of emphasis and BA/BS major. Articulation agreements in seven other baccalaureate pre-major pathways are under construction.

Dual Admission Agreements

To facilitate student transfer after associate degree completion, a community college and a university can concurrently admit a student meeting admission requirements for both institutions. The dually-admitted student has the advising and student service benefits of both institutions and can enroll in classes offered by each.

Designated Associate of Applied Science Courses not Designed for Transfer

As required by the CCTA, all community colleges are identifying in catalogs and all web course listings the courses required for the Associate of Applied Science majors (not AA/AS university parallel programs). These career courses do not have university course counterparts, as the A.A.S. prepares a student for employment after associate degree completion and not transfer to a baccalaureate program.
Common Course Numbering
Lower division courses meeting general education and pre-major path requirements carry the same number (and often title) at all community colleges and universities. The common course numbers ensure course equivalency and facilitate transfer.

Tennessee Transfer Pathways
The 52 Tennessee Transfer Pathways (TTPs) developed to date by interdisciplinary committees ensure a seamless transition to a public four-year university in the state of Tennessee once you receive an associate’s degree from any of Tennessee’s community colleges. By choosing a pathway, you are assured your credit hours will allow you to transfer to any state university as a junior to pursue a bachelor’s degree in your chosen field of study. Many private universities also participate in the TTPs.

Reverse Transfer
The CCTA set the stage for legislation, passed by the General Assembly in 2012, authorizing reverse articulation and transfer agreements between community colleges and four-year institutions. Reverse transfer programs are intended for students who transfer from a community college to a university without having earned an associate’s degree. College credits subsequently earned at the university may then be transferred back to the community college, where a degree audit is conducted, and students are awarded an associate’s degree if all degree requirements are met.

In late 2013, Tennessee received a “Credit When It’s Due” (CWID) grant and joined the 15–member consortium of CWID states. In Tennessee, reverse transfer is defined as a process that “…allows a student who completed a minimum of 15 hours at a participating Tennessee two-year institution and transferred to a participating Tennessee four-year institution to combine college credits from both institutions and apply them toward an associate degree.” All public Tennessee community colleges and universities participate in reverse transfer, as do a growing number of Tennessee independent colleges and universities.

Policy and activities related to reverse transfer are important on two levels. First, reverse transfer enables eligible students to receive a first associate’s degree that accurately reflects their educational attainment and allows them to compete more successfully in higher education and the workforce. Second, some two million students nationwide attended college for two or more years between 2003 and 2013 and did not earn a degree. According to Lumina Foundation, 78 percent of students nationwide who transfer from a community college to a four-year institution do so without a degree. Early indicators also show nearly a 10 percent increase in four-year graduation rates for students awarded associate degrees by reverse transfer. Therefore, reverse transfer addresses a national problem that benefits traditional-aged students and adult learners alike.

Finance Policy Alignment
Outcomes-Based Funding Formula
Following passage of the CCTA in 2010, Tennessee introduced an outcomes-based funding formula model that rewards institutions for the production of outcomes related to their mission that further the educational attainment and productivity goals of the CCTA, the Drive to 55, and the higher education Master Plan. This was an important first step in the development of finance policy that is both more closely linked with state policy goals and that integrates the other significant components of higher education finance, namely infrastructure spending, tuition, and financial aid.
Capital Funding
Capital expenditures — outlays for facilities construction and maintenance — are an important, yet under examined, component of higher education funding. In some years, such expenditures can comprise as much as 15 percent of the state higher education budget. While capital expenditures represent a substantial outlay by states and an important revenue stream for institutions, researchers have found that capital spending can be highly susceptible to state economic trends and political influence.

Recent reform efforts have focused on linking the higher education capital priorities to the principles and goals of the CCTA and the Drive to 55. Of note about recent policy changes to the capital outlay process is that new projects now have a matching component requiring institutions to leverage external and internal funding streams to complement state investment. Further effort is needed to establish a capital process that allows for: nimble adaptation to emerging economic opportunities in line with the Drive to 55; more efficient use of facilities; and funding of infrastructure needs unrelated to bricks and mortar, such as research, equipment, technology, and academic program development.

Tuition and Financial Aid Policy
Finally, the finance trends of the last 10-15 years have heightened the need for effective state policy in tuition and financial aid as tuition and fee revenues comprise 60-70 percent of most institutions’ unrestricted funds. While Tennessee has continued to be a moderate fee state, our financial aid is one of the highest per capita in the U.S. which has in turn been one of the causes of the below average debt levels that graduates accumulate. These facts offer Tennessee an opportunity, as the existence of significant financial aid resources and moderate tuition provide for the policy focus to be on the distribution of financial aid, rather than its overall level. As Tennessee has generous financial aid resources, it is critical that this finance policy lever also be linked with CCTA and Drive to 55 goals.

In summary, Tennessee has begun to confront difficult questions about higher education finance policy, with linkages among the various efforts that all contribute to larger statewide goals.

Constructing a Culture of Access and Success: Building Capacity in Tennessee Communities
Like the CCTA before it, the Drive to 55 articulates a policy agenda focused largely on college completion, or success, and postsecondary/workforce alignment. However, it must be noted that these initiatives are also about college access in the sense that they focus on reaching out to populations of underserved students, including not only those in the focus populations of adults, low income students, and academically underprepared students, but all underrepresented students — for example, first-generation-in-college students, minority students, veterans of military service, and students pursuing science, technology, engineering, and mathematics (STEM) careers. Before those students can complete, they first must enroll and participate successfully in the postsecondary education and training process. This mindset is good for students, for institutions, and the state. Indeed, one might think of growth in credentials necessary to achieve the Drive to 55 as relying primarily if not entirely on the successful engagement of historically underrepresented students.
In the past, the postsecondary education community’s outreach to these students might be characterized as: episodic as opposed to systematic; bilateral, involving agreements between two or more local partners, often inside the education sector; externally, unevenly, or poorly funded; and time-limited as opposed to ongoing. Worst of all, such outreach activities were seen as “extra” — something nice to do, but at the periphery of the postsecondary universe and certainly not mission-critical.

Fortunately, over time, and especially in Tennessee, our thinking about and approach to student outreach has evolved to be characterized by: 1) a variety of allied partners both within and outside what is traditionally thought of as the education community; 2) multiple sources of funding, including government at every level (federal, state, and local), private foundations, institutions, business and industry, private citizens, and local communities; 3) an understanding that financial resources are but a down payment on the human commitment required for effective outreach and service to underserved populations; and 4) a focus at the state level that is less about administering programs and more about capacity-building at the local level toward a culture of successful college-going. It is this mindset that drives THEC’s outreach activities to economically and academically at-risk P-16 students and to adult learners.

**P-16 Initiatives**

THEC’s Office of P-16 Initiatives aims to increase the number of Tennesseans accessing and succeeding in postsecondary education, with a special focus on students economically or academically at risk. With this end in mind, the Office of P-16 Initiatives designs and implements college access and success initiatives with the goal of empowering communities, local education agencies, and other partner organizations to create a statewide culture of college-going and attainment.

**Adult Learner Initiatives**

At the state level, the focus on providing adults enhanced access to postsecondary education and support for completion of a credential is rooted in the overarching goal of ensuring that postsecondary education is a viable option for any adult Tennessean who chooses to pursue it. Considering the unique circumstances and challenges that adults face when returning to college or entering for the first time, meeting this goal will require increased flexibility, support, and guidance for the student from a variety of sources.

While the obvious stakeholders of any efforts to increase adult learner success are the students and the institutions, many others such as employers, workforce agencies, and communities have a vested interest in the success of adult learners and how that success can translate to increased economic development in a region. Additionally, in an environment of constrained institutional capacity, a mismatch of skills needed by employers and available job applicants, and the periodic questioning of the value of a degree, it is our responsibility to ensure that Tennessee’s adult learner initiatives are holistic, connected, engage multiple stakeholders, and leverage available resources.

Therefore, each of the current state-level adult learner initiatives touch more than one stakeholder group (students, institutions, employers and workforce agencies, and/or communities) and fall within at least one of five functional categories. The functional categories are key to understanding the alignment of programs with each other and within the Drive to 55. Every program can be described as falling within at least one, and often more than one, functional category:
1. **Research for building the policy framework**: Research and data help drive the initiatives pursued, as well as help message the importance of finishing a credential to various audiences.

2. **Supporting and reaching out to adult learners**: Reaching out to and informing potential adult learners of their options is very different than doing the same for traditional students in high schools. Additionally, adults face challenges that often require high touch support, encouragement, and guidance.

3. **Supporting and building capacity within institutions to serve adults more effectively**: Providing institutions with technical assistance to address identified challenges, and when possible, providing resources to help them tackle those challenges can positively impact the way adults learners are served at the institutions.

4. **Developing and leveraging employer and workforce partnerships**: Crafting new and innovative partnerships between higher education and employer and workforce entities for the purpose of both outreach and providing needed services could result in enhanced understanding and guidance for adult students in choosing their educational and career paths.

5. **Coordinating community and regional initiatives**: The success of any adult learner initiative will be determined at the community level. Communities that recognize the importance of more adults with credentials and skills in the areas that employers need as a boon to the local economy can begin shifting attention to adults and messaging the importance of continued education.

Tennessee's P-16 and adult learner initiatives comprise a vast array of outreach programs, all of which are listed in Appendices F and G.

**Accountability and Improvement**

The final tools available to aid in Drive to 55 goal attainment have to do with ongoing evaluation for the dual purposes of public accountability and institutional improvement.

**Quality Assurance Funding Program**

The measures of program and institutional quality contained in the Quality Assurance Funding (formerly Performance Funding) program provide a balance and counterpoint to the quantitative and productivity leaning outcomes-based formula. Additionally, Quality Assurance Funding enables institutions to align (or “customize”) funding metrics to campus priorities to a greater extent than that allowed by the outcomes-based formula.

Institutions may gain additional funds (up to 5.45 percent of operating appropriations) on performance incentives for student success on national examinations in major fields and general education, and for institutional success in program accreditation and qualitative program review, among many other quality measures.
Master Plan Progress Report

For the duration of this Master Plan, THEC will produce an annual report monitoring the progress on each of the aforementioned issues against the overarching postsecondary attainment goal of the Drive to 55. The report will maintain a continued focus on progress toward: 1) the degree and postsecondary certificate targets outlined in the Plan, including not only outputs, but inputs and through-puts as well; 2) full, equitable, and successful participation in Tennessee postsecondary education by students in focal populations historically underserved in this state; and 3) fuller alignment between the institutions, systems, boards, and commissions that represent the supply of postsecondary educated and trained human capital in Tennessee and the employers and state agencies that represent the workforce and economic development demands of the state. However, it will also be flexible enough to reflect the college completion agenda as it evolves in the Volunteer State over the next decade, in ways that best serve the state and its citizens.

1. Pursuant to the degree projections presented in Section 1, THEC will take stock each year of the number and types of degrees produced by each sector, relative to the number and types of degrees projected. This will allow THEC to determine each sector’s contribution to the Drive to 55 and strategize and intervene as necessary. Further, THEC will evaluate the successes of the Tennessee Promise program and Tennessee Reconnect initiative, to determine their effectiveness in moving Tennessee toward the Drive to 55.

2. Additionally, THEC will evaluate the outcomes of the special populations discussed above: students who are academically underprepared, students who are low income, and adult learners returning to higher education. Beyond providing descriptive information about these populations and the rates at which they complete credentials, THEC will identify and evaluate the policies and programs that contribute positively to these students’ success.

3. Finally, THEC will continue to collaborate with other state agencies to determine the postsecondary training and higher education needs of Tennessee’s current and future workforce, and identify relevant “skills gaps.” This will allow higher education and the workforce to begin “speaking the same language” with regard to aligning degrees and skills with workforce needs.

Throughout the ten year duration of this Master Plan, THEC will produce an annual report that will explore the progress and direction of each of the aforementioned goals and strategies. This report will be shared with higher education stakeholders (i.e. Governor’s staff, legislators, system and institution administrators, etc.) and will allow the Master Plan to evolve over the next decade in ways that best serve higher education and the needs of the state as a whole.
VI. Observations and Recommendations
The Drive to 55 has united stakeholders across higher education sectors around a universally accepted goal that is simultaneously aspirational and achievable.

**Drive to 55**

The principal tool at Tennessee’s disposal for achieving the Governor’s bold goal — that, in contrast to Tennessee’s current postsecondary attainment rate of 38 percent, a decade from now 55 percent of the state’s working-age population (ages 25-64) will have earned a college degree or other high-value postsecondary credential — is the Drive to 55 itself. This policy agenda has united stakeholders across higher education sectors around a universally accepted goal that is simultaneously aspirational and achievable. Furthermore, it is inclusive, relying on institutions at every level and from every sector — public and independent, including proprietary schools — to contribute to goal attainment.

The Drive to 55 goal and agenda also provide a framework for establishing priorities and allocating resources, both to and within campuses. Two key tasks of first importance are: 1) to understand the numbers of degrees and other postsecondary awards necessitated by the Drive to 55 — statewide, by system, by sector, and eventually by institution; and 2) to develop widespread agreement about the implications of the Drive to 55 for aligning postsecondary outputs and outcomes with current and future workforce and economic development needs of the state.

**How Many Credentials?: Charting a Glide Path to the State Goal for Postsecondary Attainment**

1. “How many degrees and other high-value postsecondary credentials does Tennessee need among its working-age population?” Fundamental to answering this question is shared agreement as to the types of credentials that should be counted against the Drive to 55 goal. Working definitions of terms currently in wide use (degree, certificate, apprenticeship, and high-value) and some emerging ones (industry certifications, non-credit continuing education certificates, and digital badges) are needed before the fundamental question can be operationalized.

Such conversations are only just beginning at the national level. Tennessee’s award count should be as inclusive as possible, given that all award types included can: actually be captured and counted; are backed by an education or training program of sufficient rigor and quality; and have actual labor market value. This Plan recommends that the state of Tennessee give every consideration to including non-credit continuing education certificates, apprenticeships, industry certifications, digital badges, and the like in its postsecondary attainment analyses relative to the Drive to 55 at such time as a clear national consensus has emerged as to:

   a. The quality and rigor of education and training programs issuing such credentials;

   b. The extent to which the labor market values these kinds of awards and distinguishes them from the more traditional diplomas, certificates, and degrees awarded by postsecondary institutions;

   c. How reliable, valid, accurate, and comprehensive data on these credentials might be collected, by whom, and at what intervals, and;

   d. Whether these educational episodes can be linked to subsequent employment outcomes.
2. The statewide goal is rightly placed in terms of rhetoric, achievability, and the duration of sustained effort required. However, it assumes that current rates of in-state employment and net in-migration by college graduates will remain unchanged. Additionally, it carries an implicit assumption that a 55 percent postsecondary attainment rate will be as competitive (or “competitive enough”) in the global marketplace in 2025 as it is today. The adequacy of the 55 percent goal should be re-assessed in five years in light of intra- and inter-state contexts that are likely to change.

3. Reaching the Drive to 55 statewide goal by the year 2025 will require producing a total of 871,309 degrees and postsecondary certificates over the next ten years, translating to 79,210 credentials to be awarded annually. The most recent annual count of postsecondary awards from all systems and sectors, public and independent, stood at 69,817 awards for the year.

   a. The compound annual growth rate (year over year) required to attain the statewide goal is 1.15 percent, an increment of 13,202 credentials per year.

   b. Projecting the institutions' natural degree growth for the period results in a cumulative gap of 77,646 additional postsecondary credentials awarded to state residents over course of the next ten years, translating to 1,180 additional credentials needed each year.

4. In the next ten years, certain postsecondary sectors are projected to account for different shares of total certificate and degree production than they do now. The assumptions that informed the Plan's system and sector analyses were as follows:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Historical share (2006-2014)</th>
<th>Future share (2015-2025)</th>
<th>Proportional change assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public universities</td>
<td>28.9%</td>
<td>28.9%</td>
<td>no change</td>
</tr>
<tr>
<td>Community colleges</td>
<td>12.1%</td>
<td>15.1%</td>
<td>plus 3 percentage pts</td>
</tr>
<tr>
<td>TCATs</td>
<td>9.3%</td>
<td>10.3%</td>
<td>plus 1 percentage pt</td>
</tr>
<tr>
<td>Independent non-profit</td>
<td>17.5%</td>
<td>17.5%</td>
<td>no change</td>
</tr>
<tr>
<td>For-profit &amp; proprietary</td>
<td>32.3%</td>
<td>28.3%</td>
<td>minus 4 percentage pts</td>
</tr>
</tbody>
</table>

5. Furthermore, this Plan asserts that nearly two-thirds of this growth will need to come from adult learners (individuals of age 25 and above at the time of completion), with the remaining one-third coming from what has historically been thought of as “traditional age” students (18-24).

   a. Specifically, the proportion of credentials earned by adult students, by postsecondary sector, is assumed to rise from the current 50.9 percent (or 443,263 awards) to 65.5 percent (or 570,455 awards) over the next ten years.

   b. Given the assumptions of this analysis, the adult learner total breaks down by sector as follows:

4 The term “additional credentials” refers to a number of awards beyond current levels as well as those suggested by natural growth.
6. Credential production targets for postsecondary systems, sectors, and award levels should be established by the THEC analyses contained in this Plan, pending review and approval by the appropriate boards. A governing board may choose to establish targets for institutions under its purview.

7. Responsibility for tracking system and state progress against the Drive to 55 should rest with THEC.

**Credentials for What?: Aligning Postsecondary Outputs and Outcomes with Economic Needs**

1. Through a consultative process involving the Department of Economic and Community Development, the Department of Labor and Workforce Development, the Board of Regents, the University of Tennessee System, and the Center for Business and Economic Research, THEC should develop a “hot list” of the most under-supplied high-skill and/or high-wage occupations. Under-supply may be defined in terms of supply-to-demand ratio or the raw number of annual job openings requiring some level of postsecondary education or training.

   a. The aforementioned list *may* be used in future iterations of the outcomes-based public higher education funding formula, the Quality Assurance Funding (formerly Performance Funding) program, and academic program development.

   b. The list *should* be used to inform broad-based communication campaigns aimed at students, their families, and other influencing agents such as college planning websites, high school guidance counselors and other school personnel, Tennessee Promise mentors, college career counselors and counseling centers, and student peers.

2. Stakeholders’ thinking about educational supply and occupational demand should increasingly be informed by larger “catchment areas” of related skills, academic and training programs, and occupations that require or utilize those skills.

3. Consistent with the previous recommendation, degrees in the liberal arts and social sciences must not be devalued in pursuit of the Drive to 55. Multiple studies indicate that these are not mutually exclusive aims. Liberal arts degrees are in fact workforce degrees.
4. The Governor’s Workforce Sub-Cabinet should remain in effect as a standing (as opposed to ad hoc) task force to coordinate higher education, state agency, and business/industry informational needs and roles relative to the Drive to 55.

   The task force should determine informational needs, adopt Drive to 55 in-common performance metrics that are shared across two or more agencies, and set (and re-set as necessary) priorities that cut across agencies and stakeholder groups.

5. In consultation with stakeholders in the state’s postsecondary community, THEC should study and make recommendations concerning the feasibility of phasing in a requirement that certificate and degree programs contain an embedded “real world” work requirement (i.e., internship, externship, on-the-job training, apprenticeship, or co-op).

**The Complete College Tennessee Act Revisited**

The Complete College Tennessee Act (CCTA) of 2010 was landmark legislation nationally at the time of its passage, and still is in many respects. That said, five years in, certain provisions of the act bear re-examination.

**Articulation and Transfer Provisions**

1. Based on the higher education agencies’ response to a May 2012 performance audit of CCTA implementation, statute was amended to assign THEC responsibility for identifying institutions for which dual admission agreements are appropriate, based on geographic or programmatic considerations. As a result, THEC should: undertake a formal review of existing agreements based on feeder- and receiver-institution patterns found in its annual Articulation and Transfer report to the General Assembly; take inventory of the geographic, programmatic, and other considerations that govern institutions’ decisions to forge or forgo these agreements; and make recommendations to executive and legislative leadership concerning continuation and/or improvement of the dual admission process.

2. The following recommendations are made relative to the UT-TBR-TICUA Articulation and Transfer Council:

   a. Following the passage of the CCTA, 52 Tennessee Transfer Pathways (TTPs) were negotiated by community college and university faculty members in each discipline. These pathways should be reviewed at every meeting of the Articulation and Transfer Council to ensure all curricula are current and to resolve any student appeals or institutional concerns relative to the implementation of the pathways.

   b. The Articulation and Transfer Council should consider applying course level information, as appropriate, to all TTP courses to clarify whether courses are to be offered and accepted at the lower or upper division.

   c. Consistent with the recent recommendation of the Articulation and Transfer Council, the higher education outcomes-based funding formula should weight equally the community college’s and the university’s proportion of effort in producing an associate degree graduate by way of reverse transfer, with half of the outcome funding for that graduate accruing to the sending community college and the other half to the receiving public university.
3. All current and future TTPs should be amplified to the extent that transferable course sequences are not only identified and listed, but each course is sequenced and “mapped” to the semester during which it is recommended that the course be completed.

4. Reverse transfer should be factored into future iterations of the outcomes-based formula, but only after all public universities and community colleges begin participating in the reverse transfer network.

**Funding Mechanisms and Issues**

5. Fully funding the productivity gains captured by the public higher education outcomes-based formula (OBF) is of paramount importance to the institutions.

6. Since the CCTA established the community colleges as a unified system, the community college degree and credential production metrics should carry equivalent or very similar weights across all colleges. The remaining community college OBF metrics should be weighted differentially based on each college’s mission and priorities.

7. The OBF progression metrics reward institutions when students achieve a certain credit hour benchmark or milestone. These have little to do with individual students’ actual course loads, yet, on a certain level, they do communicate the state’s assumptions about the increments at which students should progress through their program of postsecondary study.

   In the first five years of OBF operation, progression benchmarks were set at 12, 24, 36, and/or 48 credit hours for community college students; and 24, 48, 72, and/or 96 credits for public university students.

   a. The progression benchmarks for public university students should be moved up to 30, 60, and/or 90 credit hours.

   b. Given the 12-hour full-time load assumption built into the Tennessee Promise and other state and federal aid programs, it is premature to move up the community college benchmarks this year.

   c. The impact of increasing the university benchmarks, and the feasibility of increasing such benchmarks in the community college setting, will be enlightened by a study of student credit loads and grade point averages for students of differing academic abilities and other characteristics. Following that study, the question of appropriate progression benchmarks in the four-year and two-year outcomes-based formulae should be revisited.

8. By the end of FY 2015-16, and on an annual basis thereafter, a task force involving executive, legislative, and higher education leadership should be convened to discuss long-term financing strategies for the Drive to 55. As institutional outputs and outcomes escalate under the OBF and demands on the state budget increase and intensify, an urgent need exists to map a strategy regarding how the state, its postsecondary systems and institutions, the Federal government, employers, and local community leaders can come together to pay for the Drive to 55 and its component parts. Part and parcel of any set of strategies will be trade-offs and role definitions for:
a. Tuition and financial aid, including a re-examination of state aid programs in light of financial commitments to Tennessee Promise and Tennessee Reconnect and the growth assumption behind adult learners;

b. In-state and out-of-state students;

c. Federal, state, and local support;

d. Investments in capital and other innovations or priorities (including shared programs and facilities, research collaboratives, related equipment and personnel, and technology transfer opportunities); and

e. The potential for additional cost savings and operational efficiencies within and across institutions.

Constructing a Culture of Access and Success: Building Capacity in Tennessee Communities

The concept of working within communities to build a rich community-based culture, supportive of postsecondary student access and success, should serve as the organizing framework for future outreach efforts to underserved student populations. These include not only those previously identified for funding formula purposes — adult learners, low income students, and academically underprepared students — but first-generation-in-college students, veterans of military service, minority students, and individuals enrolling in science, technology, engineering, and mathematics (STEM) programs.

1. Tennessee's communities would be well-served by the development and publication of community-specific data, easily understood and widely distributed, about each locality's “share” of the statewide Drive to 55 attainment goal.

   a. These data displays would aid in goal-setting at the local level and make the importance of the Drive to 55 more tangible to local governments, high schools, colleges, and businesses.

   b. The data would also demonstrate, on a county by county basis, the changes necessary in the graduation rates of local high schools, rates of collegiate enrollment by recent high school graduates, and postsecondary progression and graduation rates needed at the local level for Drive to 55 achievement.

2. The “student flow model” developed for Tennessee by the National Center for Higher Education Management Systems (NCHEMS) demonstrates that Tennessee cannot reach the Drive to 55 without investing resources of all kinds — human, financial, and political — in adult learners. As stated above, adult learners will make up the majority of future growth in degree and other postsecondary credential production.
3. This investment should begin with the “low-hanging fruit” — a concentrated campaign to re-engage previously enrolled adult learners (approximately 100,000 individuals previously enrolled in public and participating independent institutions), beginning in the 2015-2016 academic year.

These adults, and the campuses that will serve them, should be supported by a concentrated college coaching effort to build self-efficacy skills among adult learners and encourage their continued enrollment and progress. Adult-serving institutions should be offered the optional external support of a proven college coaching organization should they need it, with the understanding that the external agent will assist the college(s) in building their own internal capacity to support adult learners on an ongoing basis.

4. The majority of Tennessee’s public institutions have undergone the Adult Learner Friendly Institution (ALFI) self-study process and received the Council for Adult and Experiential Learning’s (CAEL’s) ALFI designation. The remainder of institutions should do the same in short, possibly as part of the Quality Assurance Funding (QAF) process. In the process, they will gain a better understanding of the adequacy of institutional service to military veterans, an important subset of Tennessee’s adult learner population that our state is uniquely well-positioned to serve.

**Optimizing Online Education**

1. The Regents Online Campus Cooperative (ROCC) should be re-imagined as a statewide electronic campus, a consumer-facing environment that appears seamless (“all one system”) to the user but includes information about every course and program being offered online by the TBR and UT systems.

   a. An underlying principle should be that this realm is about online programs, not just courses.

   b. ROCC should provide linkages to the TTPs organically within the site.

   c. This information (the state of Tennessee’s online presence) must be disentangled — more visible, transparent, and clear — for students.

   d. Online education delivery should be studied to better understand the instructional costs associated with it and identify greater cost efficiencies that might be realized with this mode of instruction. The tuition premium currently charged for online courses should align with the cost of delivery.

2. Transparent and easily-accessible information about offerings from a growing array of alternative, online, and competency-based providers should be posted on the Tennessee electronic campus website, with the acknowledgment that their courses are endorsed by the American Council on Education (ACE) and easily transferable into a Tennessee public institution via the state’s prior learning assessment (PLA) process, recently branded “Timewise Tennessee.”
Assessing Competency

Competency-Based Education

1. Tennessee postsecondary systems and institutions should continue to build on and explore opportunities for the responsible use of competency-based education. A prime and pressing opportunity for doing this is to build a competency-based path into and out of the Associate of Applied Science (A.A.S.) degree.

Prior Learning Assessment

Tennessee postsecondary institutions have accepted credits via prior learning assessment (PLA) for years. The acceptance of the College Board’s College Level Placement (CLEP) exam for general education credits and DSST (formerly DANTES subject standardized tests) for military credits are prime examples. This Master Plan encourages better and more widespread practice of PLA throughout the state of Tennessee. It is beneficial to students, institutions, and the state alike.

Every Tennessee higher education institution has the responsibility and right to make its own decisions relative to the transcripting of student credits earned by way of the PLA process. Should an institution lack the capacity to carry out any or all of the PLA function, or adjudicate a special case, it should be able to rely on a statewide network of individuals possessing the appropriate expertise.

1. PLA should be usable for general education, in-major, and elective credit.

2. THEC should take inventory of the existing PLA network and the academic disciplines and institutions in which expertise already exists. THEC should publish this information on the Tennessee Transfer Pathways and Timewise Tennessee PLA websites.

3. When an institution needs advice as to the appropriate handling of a particular case in which a student has applied for PLA, it should be able to reach out to a network of individuals and institutions in the Tennessee postsecondary education network for help. Regardless of any advice the institution receives from the PLA network, the institution itself is ultimately responsible for the credit-awarding decision.

4. On behalf of the public systems and colleges, THEC should make arrangements with ACE or the Council on Adult and Experiential Learning (CAEL) for Tennessee institutions to avail themselves of those bodies’ PLA-recommending systems in instances where outside assistance is indicated.

5. Prior learning assessment (PLA) should be rewarded through the amended outcomes-based formula (OBF), beginning as soon as possible. This should begin with the Fall 2015 and Spring 2016 end-of-term data used by the OBF to build the FY 2017-18 public higher education budget request and funding distribution.
   a. Institutions’ loading of all PLA credit on the front end, regardless of its applicability to the student’s major, can result in “credit dumping,” which, in turn, can result in the student’s premature loss of financial aid.
   b. Institutions should transcript credit hours presented for PLA in the manner recommended by the Tennessee Funding Formula Review Committee.
6. The PLA process is concluded once a Tennessee public university or community college has reached a credit-awarding decision for a student’s portfolio or particular set of demonstrated competencies — knowledge, skills, and abilities. That is, once transcripted, any resulting credit should not be subject to re-evaluation by other public institutions.

**Evaluation for Improvement and Accountability**

1. With its greater flexibility in metric selection and inclusion of qualitative performance measures, the Quality Assurance Funding (QAF, formerly Performance Funding) program should continue as the philosophical and fiscal counterbalance to the highly-quantified and productivity-oriented outcomes-based formula.

   a. A key aspect of the QAF process is that each institution is required to select five student focus populations from a list of a dozen or more potential such populations. The five focus populations represent students toward whom the institution plans to direct resources and initiatives over the course of the 2015-20 QAF cycle.

   b. The job placement standard should begin to leverage the power of the Department of Labor and Workforce Development’s Unemployment Insurance (UI) labor market data in the Tennessee Longitudinal Data System (TLDS).

For years, data for the job placement standard were self-reported by institutions based on surveys of recent program completers. This had certain advantages in that departmental personnel kept good track of their recent program graduates and often had knowledge of out-of-state placements that might not be picked up by a more automated process. Further, the sharing of data between and across state agencies (such as higher education and labor) was often a laborious and time-consuming process whenever it was attempted at all. The primary disadvantage, of course, was that the data were self-reported and therefore non-verifiable.

Recently, through investments made by the state of Tennessee, a federal Race to the Top grant, and other grant activity, the sharing of information and de-identified data across state agencies in the conduct of their work has become routinized, faster, and secure with the creation of the TLDS, a de-identified unit record data system serving five participating state agencies and administered by a capable and trusted third party — the Center for Business and Economic Research at UT Knoxville. While the advantages of such a system are obvious for the tracking of labor market outcomes of recent college graduates, two disadvantages are that it does not at present capture self-employed individuals or graduates who move out of state after college completion.

Acknowledging the trade-offs between institutional self-reporting and routinized reporting from the state’s “p-20” longitudinal data system, it is the recommendation of this Plan that the job placement standard begin to evolve away from self-reporting and toward the official employment data source maintained by the state’s workforce development agency. In the interim, placement data for QAF purposed should be collected via both mechanisms so that sources of differences can be identified and addressed.
2. With technical assistance from the Center for Business and Economic Research, THEC should publish an annual Master Plan Progress Report that tracks statewide, system, and institutional progress toward meeting the degree production and efficiency goals of the Drive to 55.

   a. A web-enabled, user-friendly Report interface should be designed that is available and understandable to the general public.

   b. The web interface should be dynamic in that it empowers users to select the performance indicator, year, system, institution, and focus population of interest. It should also contain the capability for users to print results and download data or figures generated during the users’ session.

   c. To the extent possible, the Report should utilize information submitted by THEC, the Department of Education, and the Department of Labor and Workforce Development to the Tennessee Longitudinal Data System (TLDS).

   d. It is important to note, however, that Progress Report interface will exclusively utilize de-identified and aggregate (tabular) data, not individual records.
VII. Conclusion
Tennessee's success in meeting the goals of the Drive to 55 and this Master Plan will not be accomplished merely by instituting the right policies, procedures, or programs, but by a sustained commitment to forging a better educated and trained Tennessee for the benefit of the state and its residents. In closing, this Plan requires commitments, from government, communities, non-profits, educational providers, and employers, to partner, innovate, and take initiative. The commitments called for here are not a one-time show of support or endorsement of a document, but a daily decision to undertake the incremental but urgent work of:

- Increasing student access to, progression through, and completion of postsecondary education and training; and
- Better aligning the efforts of secondary and postsecondary education, Tennessee business and industry, the Tennessee Department of Labor and Workforce Development, and the Tennessee Department of Economic Development.

These efforts will enable the Volunteer State and its residents to realize greater economic competitiveness and a better quality of life.
End Notes

1 The Lumina Foundation-funded “Credit When It's Due” consortium consists of Arkansas, Colorado, Florida, Georgia, Hawaii, Maryland, Michigan, Minnesota, Missouri, New York, North Carolina, Ohio, Oregon, Tennessee, and Texas. (Most states began their grant-related work in 2012. Tennessee, Georgia, and Texas joined in 2013.)


VIII. Appendices
### Appendix A

#### Historical Data Used for Award Projections

<table>
<thead>
<tr>
<th>Sector</th>
<th>Degree</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public universities: TBR</td>
<td>Associate</td>
<td>153</td>
<td>160</td>
<td>186</td>
<td>175</td>
<td>170</td>
<td>232</td>
<td>261</td>
<td>323</td>
<td>320</td>
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<td>Public universities: TBR</td>
<td>Bachelor</td>
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<td>TCATs</td>
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<td>For-profit &amp; proprietary</td>
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1The table presents counts of completers by the highest award level for public institutions and counts of awards for private institutions.
Appendix B
Credential Production by Award Level: Historical Data and Projections

[Graph showing credential production by award level from 2006 to 2025.]
Appendix C

Bachelor's Degree Production by Sector
Appendix D
Associate's Degree Production by Sector
Appendix E
Certificate Production by Sector
Appendix F

Programs of the Office of P-16 Initiatives

The Office of P-16 Initiatives aims to increase the number of Tennesseans accessing and succeeding in higher education. With this end in mind, the Tennessee Higher Education Commission’s P-16 office designs and implements college access and success initiatives with the goal of empowering communities, local education agencies, and other partner organizations to create a statewide culture of college-going and attainment. Programs of the Office of P-16 Initiatives include:

GEAR UP TN

GEAR UP TN is a movement in local communities to expand the college-going culture in Tennessee and empower students to succeed by providing them with a clear path to college. Funded through a seven-year grant from the U.S. Department of Education, GEAR UP TN works with Collaboratives in 15 counties across the state to promote college readiness and success. The program is structured to serve approximately 7,500 students in the Class of 2018 and 5,000 seniors in GEAR UP TN high schools each year.

Direct services provided to students and their families include academic support, mentoring, advising, college and job site visits, family engagement, financial aid counseling, and personalized college planning sessions. Funding also provides for professional development for teachers, counselors, and school administration on best practices for expanding and sustaining a college access culture.

By the numbers:
During the 2013 – 2014 academic year, GEAR UP TN provided services to:
• 8,111 cohort students
• 6,257 seniors
• 1,041 educators
• 18,951 parents and guardians.

Over the lifetime of the grant, the program will serve a total of 37,500 students.

CollegeforTN.org

CollegeforTN.org is a free online web portal that provides students and families with resources to research and organize the college and career search process. The site is primarily aimed at K-12 students, parents, and educators. Popular features include career and interest assessments, a guided resume builder, free ACT and SAT test preparation, customizable high school and college planning timelines, a scholarship finder, and financial aid guides and resources that are specific to Tennessee. The site provides students with one place to store information needed to prepare for and apply to college while connecting with the college access professional in their school.

By the numbers:
In 2014:
• 220,812 visits to the site
• 3,370,154 page views
• 39,851 Tennessee accounts students created
Path to College Events

Path to College Events consist of four statewide events designed to create and foster a college-going culture in Tennessee high schools. The events serve as a venue to inform students and their families of college opportunities and benefits while also providing information about Tennessee Promise requirements and deadlines. To implement Path to College Events, the Office of P-16 Initiatives creates and disseminates resources, guides, and collateral materials for use by educators.

The four Path to College Events are College Application Week, College Goal Tennessee (in partnership with the Tennessee Student Assistance Corporation), College Signing Day, and College Planning Night.

Latino Student Success Grant

Tennessee Promise Forward Grants are competitively awarded grants to public two-year institutions focused on increasing the matriculation and retention of Tennessee Promise. Funded using federal College Access Challenge Grant funds, Tennessee Promise Forward aims to build institutions’ capacity to serve Tennessee Promise students with particular emphasis placed on associate degree completion and, if applicable, transfer to a four-year institution. THEC awards grants to institutions that identify scalable, promising practices which support degree completion among Tennessee Promise students.

Student Success Course

As part of the Governor’s Drive to 55 initiative, the Tennessee Board of Regents, THEC, and the Tennessee College Access and Success Network collaborated to produce an online course designed to equip high school students with the skills and information needed to enroll and succeed in higher education. Course content includes information on choosing a college, applying for admission and financial aid, taking steps to enroll in classes and successfully navigate the college campus, and strategies for college success. The course was piloted out of the Office of P-16 Initiatives with 14 Tennessee high schools during the spring 2015. Course content is now publicly available for use by all Tennessee educators and students.

Transcript Exchange

The Office of P-16 Initiatives manages Tennessee’s Electronic Transcript Exchange. The Transcript Exchange provides a means for Tennessee high schools to submit transcript data to higher education institutions for admissions purposes and to the Tennessee Student Assistance Corporation for Tennessee Education Lottery Scholarship eligibility determination. During the 2013 – 2014 academic year, 41,185 transcripts were transmitted using the Transcript Exchange. As part of this work, the Office of P-16 Initiatives provides technical assistance to high schools in extracting transcript data from local student information systems and uploading it to the electronic transcript platform. Starting in 2016, the Transcript Exchange will also facilitate the movement of transcript data between Tennessee higher education institutions.
Appendix G

Tennessee’s Current and Developing Adult Initiatives

The Drive to 55 includes five distinct strategies, one of them solely focused on creating new programs and supports for adult learners. THEC plans to strengthen and enhance resources available to adult students, institutions, communities, and employers in order to serve this effort. These programs as outlined below focus on five functional categories within this Drive to 55 strategy which include:

1) Research to build the policy framework;
2) Student outreach and support;
3) Building institutional capacity to serve adult learners more effectively;
4) Developing new employer and workforce partnerships; and
5) Coordinating community-based efforts to serve adult learners and promote local ownership of Tennessee Reconnect initiatives.

www.TNReconnect.gov

THEC is working with the University of Tennessee system and the Tennessee Board of Regents to develop a web portal focused on providing resources to adults returning to or enrolling for the first time in postsecondary education. This new public website will help adults navigate learning opportunities available at Tennessee institutions. Adults will be provided options that fit their needs, schedules, and goals. The portal will also be designed to allow former students to enter transcript information and receive back a list of academic pathway options, institutions offering those options, and information about careers connected with those academic pathways.

The purpose of this portal is to offer a single destination for adults where they can find resources to transcend institutional boundaries including, but not limited to, offering processes to explore the benefits, comparability and costs of attaining a degree or credential. The web portal is anticipated to be completed and launched by December 2015 and will replace the content that currently exists on the www.tnreconnect.gov website.

Tennessee Reconnect + Complete

Tennessee’s adult learner re-engagement initiative will reach the 110,000+ Tennessee adults aged 25-64 who have earned at least 50 percent of credits toward a degree but have never finished college. The purpose of Tennessee Reconnect + Complete is to locate these adults and provide resources for Tennessee institutions to reach out to them and encourage them to finish their degree. Institutions will be able to reach out to the adults directly, offering information about their institution as well as the statewide Tennessee Reconnect + Complete effort.

In September 2015, THEC hosted a meeting for institutional representatives to commence the Reconnect + Complete efforts. Attendees received resources highlighting best practices, outreach resources, and the contact information for their former adult student noncompleters.

Institutions will receive marketing materials in December and commence outreach in early January to coincide with the statewide media push. In March 2015, THEC will sponsor regional events for adult “noncompleters” to explore postsecondary opportunities and re-enroll.
**Tennessee Reconnect Communities and Tennessee Reconnect Community Network**

As Tennessee is developing initiatives, programs, and supports at the state level for adult learners, communities are where the success of Drive to 55 will be decided. By localizing the Drive to 55, communities will be engaged in assisting and supporting their residents in the pursuit of postsecondary completion.

This community-based service would reach out to and support adults locally to re-enroll in postsecondary education and complete a postsecondary credential. Prospective adult learners would be provided a variety of services including advising, career counseling, and scholarship resources. These community centers will also act as a connecting point for local employers, local institutions of higher education, and prospective adult learners, working to create awareness of the benefits of adult completion as a strategy for economic development and a source for workforce talent.

Through a partnership with the Graduate! Network, Tennessee will garner the capacity, resources, and expertise to engage communities to design holistic local strategies, leverage state resources, and increase access to and success in postsecondary education for adults.

This initiative will have two major components: 1) the development of Tennessee Reconnect Communities and their associated services, and 2) the development of the Tennessee Reconnect Community Network to serve as a source of ongoing technical assistance, support, and professional development for the community sites. The result will be a coordinated effort to reach adults and comprehensively support them to credential completion, facilitated by communities based on their unique characteristics and challenges.

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**TimewiseTN — Prior Learning Assessment Branding**

As a state, Tennessee has made great strides to develop clearer, more comprehensive PLA standards and provide more PLA options to students. However, students are finding it difficult in some cases to locate information about those PLA opportunities. THEC has been working with a marketing firm to develop a common identity for all PLA programs in the state. The result is TimewiseTN: Turn Your Years of Knowledge into College Credit. THEC has developed a logo and is in the process of creating a student orientation brochure and video that will be made available to any institution that will also use the TimewiseTN moniker. Institutional PLA programs will not change in form; however, the goal is to develop a common language that will be clear to students and allow them to find PLA resources on campus. The adoption of the logo and program name (TimewiseTN) will be voluntary, and those institutions who do adopt the name will be identified on the adult learner portal as TimewiseTN schools.
Conducting Adult Learner Research and Building the Policy Framework

In order to fully understand and illustrate the importance and condition of adult learners in Tennessee higher education, we must more deeply analyze and report the rich data we have access to in our state. Beginning early 2016, THEC will pursue a large scale research project which will include 1) a qualitative overview of factors related to adult learners using THEC’s Student Information System; 2) a request to Tennessee higher education faculty to conduct original research on the state of adult learners; and 3) a request to Tennessee higher education administrators and non-profit organizations to develop qualitative analyses of evidence-based practices in serving adult learners.

This year-long multifaceted research project will culminate in a publication and a convening in early 2017 to share the outcomes of this research to essential state higher education policy leaders, non-profit organizations, and institutional faculty and staff. Our aim is to further understand the complexities, challenges, and barriers facing adult learners in Tennessee and to inform and influence state and institutional policy related to adult learners through this research initiative. Further, THEC will disseminate this research nationally to pertinent organizations, commissions, and institutions.