APPENDIX B: METHODOLOGY FOR DATA-BASED EDUCATIONAL MASTER PLAN OBJECTIVE MEASURES

In support of the development of the Educational Master Plan, the Office of Institutional Effectiveness worked in cooperation with a team of faculty (Karyn Daniels, Donna Fletcher, Kenna Hillman, Ruben Page, Kevin Ryan, Sigrid Sexton, and Jeff Wheeler) selected by the President of the Academic Senate, Janice Tomson, to develop the methods and metrics by which the targets could be measured and evaluated overtime.

In all cases, whenever there was a choice, metrics and data that were publicly and openly available to all was used in order to maximize the transparency and availability of these data to all institutional (students, faculty, staff, and administrators) and extra-institutional (parents, community members, NGOs, funding agencies, local, state, and Federal governmental officials, etc.) stakeholders. When publicly available data was not available, we have endeavored to document precisely how that data has been extracted from our internally available sources, in order that independent institutional actors as well as any current and future members of the Office of Institutional Effectiveness will be able to reproduce the current state of these metrics and to replicate them with future data to maximize our institutional ability to track these outcomes over time.

The primary sources of data that were used to develop the targets for the Educational Master Plan are:

1) Publicly available data from the California Community College’s Chancellor’s Office (CCCCO) Data Mart which can be found here: http://www.cccco.edu/ChancellorsOffice/Divisions/TechResearchInfo/MIS/DataMartandReports/tabid/282/Default.aspx

2) Management Information System (MIS) referential data files which are produced by the CCCCCO based on information submitted to the CCCCCO by Long Beach City College. These data files form the basis of the CCCC Data Mart above as well as the ARCC Report below.

   a. These are primarily based on the MIS data but also use other data collected by the CCCCCO, including state data from the K-12 education system, from the California State University system, from the University of California system, and from the National Student Clearinghouse, among others.

4) The SMART Tool provided by the California Partnership for Achieving Student Success (CalPASS): http://www.calpass.org/. While this tool is not open broadly, a small number of institutional memberships are available. Please consult with the Associate Dean of Institutional Effectiveness to acquire as to their availability if you would like to use this tool.

5) Institutional data available through the Long Beach City College Data Warehouse (powered by IBM’s Cognos software) or through PeopleSoft. This information should be easily available to all units with Business System Analysts or through contacting the Office of Institutional Effectiveness.
For each of the Measurable Objectives, the source and method used to generate the current results for Long Beach City College is noted.

**Student Success**

**A. Student Preparedness**

**Measurable Objective 1** – Increase the percentage of first-time students who complete transfer-level English, math and reading in the first year.

Because the CCCCO does not track assessment results, a combination of institutional and MIS data was employed. Cohorts of first-time students were identified as those who meet the following criteria, roughly equivalent to the definitions used in the CCCCO Data Mart and ARCC Reports:

- Using our institutional data, students were identified whose first enrollment was in the term and year in question (usually a Fall semester term in these metrics).
  - This data was extracted from the Student Records: Enrollment: Enrollment name space in our Data Warehouse.
- Students were removed from the cohort if:
  - they had any prior enrollments to the term in question (with the exception of the immediately preceding Summer term for Fall terms).
  - they were flagged as special admits (i.e., primarily students still enrolled in high school but taking a college level course not available in their HS with us. These students represent a very small and decreasing proportion of our student body).
    - identified using a SB15 (Student Basic 15 - Student Enrollment Status) value of Y
  - they indicated that they were transferring from another college or university
    - identified using a SB15 value of 2
- Data were used from the following namespaces in the Data Warehouse to determine course completions in students’ first two semesters:
  - Student identification Number: [Enrollment].[Person].[Employee ID]
  - Enrollment term: [Enrollment].[Class Section].[Term]
  - Course name: [Enrollment].[Class Section].[Course Key]
  - Course grade: [Enrollment].[Measures].[Official Grade]
- In addition, information from institutional assessment results was needed for Reading. That information was pulled as follows:
  - Admissions: [Student Test]: [Test Component Description]
  - Linked to Student Test: [Measures]: [Person_Data_SID] student identifier.
  - That student identifier was cross-walked to our other key student identifiers using:
    - Admissions: [Application]: [Application]: [Person_Data_SID]
    - Admissions: [Application]: [Application]: [Employee ID]
    - Admissions: [Application]: [Student]: [National ID]
- The count of students who successfully completed transfer-level English, transfer-level math, or transfer-level reading included all students who enrolled in an eligible course and received a grade of A, B, C, CR, P.
  - For Math, the eligible courses included Math 27 through Math 84
  - For English, the eligible courses included English 1 (by far the most typical) through English 97
B. Student Goal Attainment

**Measurable Objective 2** - Increase the number of certificates and AA/AS degrees awarded annually over the next 5 years.

For MOs 2.1 and 2.2, the number of certificates of achievement and AA/AS degrees was generated using the CCCCO Data Mart Student Programs and Award page with the radio button set to Chancellor's Office Approved Awards: https://misweb.cccco.edu/mis/onlinestat/awards.cfm

For MOs 2.3 and 2.4, using individualized records of first-time students who had demonstrated an intent to complete generated for the ARCC SPAR, the number of students who were identified as a) Received Certificate of 18 or more Units or b) Received AA/AS degree were counted and compared to the overall number in the cohort.

**Key definitions worth noting:** First-Time Students Who Showed Intent to Complete is defined in the following way by the CCCCO:

1. Look systemwide* to determine first-time status: student who took a credit course in the CCC system for the first time. Students with prior enrollments outside the CCC system are excluded. AND
2. SX03 ENROLLMENT-UNITS-EARNED >= 12 at your college and/or anywhere in the system AND
3. One or more of the following:
   1. Transfer/Degree Intent
      Attempted Enrollment in course(s) where:
      CB03 COURSE-TOP-CODE = 17*, 1501*, 1503*, 1504*, 1507*, 1520*
      CB04 COURSE-CREDIT-STATUS = D
   2. Certificate Intent
      Attempted Enrollment in course(s) where:
      CB09 COURSE-SAM-PRIORITY-CODE = A, B
      CB04 COURSE-CREDIT-STATUS = C, D
*Systemwide is defined as all California Community Colleges

**Measurable Objective 3** – Increase the rate at which students transfer and reach transfer-preparedness within 6 years of entry to LBCC.

For MOs 3.1-3.3, the same methodology as identified in MOs 2.3 and 2.4 above was employed. However, an approximation of that methodology can be reproduced publically (but not 3.2 so the same methodology available for all 3 was used) can be found in the CCCCO Data Mart at the Transfer Velocity Project Cohort page: https://webprod.cccco.edu/datamarttrans/dmtrnsstucsel.aspx

**Key definitions worth noting:** As defined by the California Community Colleges Chancellor's Office, transfer-successful students have enrolled in any four-year institution of higher education (as identified through the National Student Clearinghouse) after enrolling at a California Community College.
Transfer-prepared students have successfully completed 60 UC/CSU transferable units with a GPA greater than or equal to 2.0.

**Measurable Objective 4** - Increase the rate for students to complete Career Technical Education programs.

In order to determine the median time to completion, MIS referential files, in particular the Student Program Award Data Elements (SP) were used to determine students who had completed a certificate requiring 18 or more units (SP02 = L, T, or F). Once students were identified as receiving a certificate during the academic year of interest, his/her first semester of enrollment at LBCC was determined searching backward in time through the Student Basic Data Elements files (SB) until they were identified as a first-time student (SB15= 1). For all students who completed an award in a particular year, the median time taken to completion was generated. Note: the cohort is students who have successfully completed a certificate. It is likely that many more begin certificate programs and do not complete them. However, there currently is no reliable way to track such students or to include them in a meaningful time to completion metric.

### Equity

#### A. Student Success

**Measurable Objective 1** - Increase success rates among under-represented student groups in completion of certificates and AA/AS degrees.

The same methodology as Student Goal Attainment: Measurable Objectives 2.3 and 2.4 was used with the data disaggregated by ethnicity.

**Measurable Objective 2** – Increase the rate at which under-represented students transfer and reach transfer-preparedness within 6 years of entry to LBCC.

The same methodology as Student Goal Attainment: Measurable Objectives 3.1-3.3 was used with the data disaggregated by ethnicity.

**Measurable Objective 3** – Increase the rates of successful completion of Career Technical Education courses among under-represented student groups.

Data for calculating success and completion rates in Career Technical Education courses were obtained from the CCCC0 MIS referential files, in particular the Course Data Records (CB). A course was identified as Career Technical Education if the Course SAM Priority Code (CB09) was A, B, or C: “A” courses are “apprenticeship,” “B” courses are “advanced occupational,” and “C” courses are “clearly occupational.” The count of students who attempted a Career Technical Education course includes all students who enrolled in a course. The count of students who were successful in a Career Technical Education course includes students who received a grade of A, B, C, CR, P. The data were disaggregated by ethnicity using Student Derived Data Element 10 (Student IPEDS Ethnicity – a simplified and more familiar version of SB29 Student-Multi-Ethnicity).