**Table D**Audit Objectives and the Methods Used to Address Them

AUDIT OBJECTIVE		METHOD	
1	Review and evaluate the laws, rules, and regulations significant to the audit objectives.	Reviewed and documented federal and state laws and regulations, as well as CCC Chancellor's Office, CSU Chancellor's Office, and UC Office of the President policies and procedures relevant to the audit objectives.	
2	Evaluate the progress that the CCC has made toward improving the number of community college students transferring to California's public four-year institutions. Specifically, obtain global data for the past five years or, if not available, for a selection of campuses, determine the following:  • The number and rate of CCC students who transferred to a UC campus or a CSU campus.  • The community college, UC, and CSU campuses with the highest and lowest transfer rates.  • The average time and accumulated credits earned by students before transferring to a UC or CSU campus and the percentage of students who received a CCC degree before transferring.  • To the extent possible, the effect of any systemwide or regulatory changes on the above outcomes.  • Identify any systemwide, regional, or campus-specific trends, including trends among racial and ethnic groups and among Pell Grant recipients.	<ul> <li>Identified cohorts of students in CCC data who first registered at a California community college in a given year and limited the cohorts to transfer-intending students, including students who expressed a goal of transferring or students who exhibited course-taking behavior consistent with an intent to transfer.</li> <li>Matched cohort students in CCC data with students in CSU and UC admission data and in National Student Clearinghouse data provided to us by the CCC Chancellor's Office, the latter of which includes information about transfers to private and out-of-state universities. We primarily used Social Security numbers for these matches, and we matched additional students using their last names and birth dates. Using this approach, we were able to successfully match more than 94 percent of CSU and more than 91 percent of UC undergraduate transfer applications from CCC students to CCC records. However, we may have been unable to identify a small number of CCC students who transferred to CSU, UC, or other universities because of limitations in the data.</li> <li>Calculated various statistics related to demographics and transfer rates to CSU, UC, and private and out of state universities.</li> <li>Reviewed transfer-related goals relevant to CCC, CSU, and UC, and evaluated the systems' efforts to facilitate transfer. We also reviewed statutory or regulatory changes that could affect the transfer rates and other statistics we calculated. As we explain in the Introduction, some of these key changes were recent or had yet to take effect at the time of our audit. In addition, as we show in Figure 4, the pandemic complicated the transfer landscape during our audit period.</li> </ul>	
3	For a selection of campuses, assess the quality and accessibility of communications and information directed to CCC students regarding transfer options to UC or CSU campuses. Determine whether barriers exist that prevent CCC students, particularly underrepresented students, including Black, Hispanic, low-income, and first-generation students, from transferring to public four-year universities.	<ul> <li>Selected five community college campuses to review and based that selection on a variety of factors, such as their geographic location, enrollment size, and publicly reported transfer rates.</li> <li>Reviewed laws, regulations, best practices, and other documents to identify criteria for how community colleges should communicate with and provide information and support to students to facilitate transfer. We then assessed each of the five selected colleges against key identified criteria.</li> <li>Based on existing research, CCC documents, and interviews with officials from the CCC Chancellor's Office and selected colleges, documented barriers that prevent CCC students, particularly underrepresented students, from transferring. We also evaluated the selected colleges' efforts to mitigate these barriers, such as through their equity plans.</li> </ul>	
4	Review and assess the role played by the CCC Chancellor's Office and a selection of community college districts and community college campuses in the transfer of students to UC and CSU campuses and identify options for increasing the number of applicants for transfer. For the selected entities, perform the following:  • To the extent possible, evaluate discrepancies among CCC campuses and districts related to the percent of students who successfully use transfer options to transfer to a four-year university.  • Determine the number of CCC students obtaining an ADT and the number of students with an ADT applying for transfer to UC or CSU and, to the extent possible, why there are differences.	<ul> <li>Interviewed officials at the CCC Chancellor's Office and the selected community colleges to understand their roles in the transfer process and to identify options for increasing the number of CCC transfer applicants.</li> <li>In conjunction with our analyses under Objective 3, assessed the efforts of the selected colleges to facilitate transfer, such as their efforts to proactively monitor and reach out to students to help them transfer. For areas in which we found that colleges could improve their practices, we also assessed the existing oversight efforts of the CCC Chancellor's Office.</li> <li>Using cohorts of transfer-intending CCC students matched to CSU and UC admissions data as described previously, calculated statistics related to whether students obtained an ADT and whether they applied to CSU or UC for transfer. We also calculated transfer rates among community colleges and CCC districts.</li> <li>Interviewed officials at each selected college and reviewed other relevant documentation to understand the potential causes for differences in transfer rates and the reasons why students may obtain an ADT or earn a large number of units but not apply to transfer.</li> </ul>	

	AUDIT OBJECTIVE	METHOD
5	To the extent possible, assess the extent to which all CSU and UC transfer options, such as ADT, TAG, Transfer Pathways, and Pathways+ programs have expanded transfer opportunities for CCC students. Specifically, perform the following for the past five years:  • Determine the number, rate, and demographics of students who completed each transfer option and were admitted to their preferred campus and major or were redirected and admitted to another campus and major.  • Determine the extent to which transfer options are available in science, technology, engineering, or mathematics fields.  • Determine the demographics, academic achievement, and transfer rates of students participating in each of the transfer options by campus.  • Determine the number of CCC students denied admission to UC and CSU by age, race and ethnicity, region, and whether they completed a transfer option.  • For CSU graduates who transferred to CSU with an ADT program, determine the number of accumulated credits the students earned upon graduating from CSU and the extent that they earned more credits than necessary.	<ul> <li>Analyzed CSU and UC application data to determine the CCC transfer application admission and denial rates by demographics, academic achievement, transfer option, and discipline across the system and at the campus level.</li> <li>Identified certain demographic disparities in admission rates and use of transfer options and interviewed CSU Chancellor's Office and UC Office of the President officials about the potential reasons for these disparities.</li> <li>Interviewed officials and collected documents from the CSU Chancellor's Office and the UC Office of the President to understand their processes for redirecting transfer students to alternate campuses or majors.</li> <li>Documented and assessed the key CSU and UC transfer options available for community college students. We also interviewed relevant system and campus officials about these options.</li> <li>Evaluated the extent to which transfer options such as the ADT, TAG, and UC Transfer Pathways are available in popular STEM fields. For the ADT, we also compared its availability in STEM fields to its availability in popular non-STEM fields.</li> <li>Analyzed CSU enrollment data to calculate the number of accumulated credits transfer students earned upon graduating from CSU.</li> </ul>
6	Assess the efforts in the past five years by UC and CSU to streamline the transfer process and improve transfer rates to the four-year-university system, as well as to students' preferred campuses and majors.	<ul> <li>Interviewed officials and documented programs and initiatives meant to streamline the transfer process at the CSU Chancellor's Office, UC Office of the President, and selected CSU and UC campuses.</li> <li>Evaluated these programs and initiatives against criteria for facilitating transfer, such as best practices reported by research institutes and transfer taskforce groups.</li> </ul>
7	Assess transfer requirements and admission standards and practices across a selection of UC and CSU campuses and how these standards and practices may be streamlined to increase transfer rates to these campuses. For these campuses, determine the following for the past five years:  • The number and percentage of CCC transfer students by race, ethnicity, gender, income status, geography, and community college campus and district.  • The average accumulated credits and grade point average of CCC transfer students by major.  • The extent to which campuses use campus- or major-impaction as a reason to deny transfer students admission. If campuses do consider impaction, evaluate the methodology campuses use for determining impaction of the campus or majors and whether campuses adequately communicate this information to students.  • The extent to which admissions consideration for ADT earners is a factor in UC's admission of CCC transfer students.	<ul> <li>Selected two CSU campuses and two UC campuses to review based on a variety of factors, such as their enrollment size, geographic location, and selectivity.</li> <li>Reviewed admission standards and practices for the CSU and UC systems and the four selected campuses. We also evaluated specific transfer requirements for a selection of popular majors at the four campuses.</li> <li>Interviewed officials within each of the three systems, including the system academic senates, about the potential to streamline transfer requirements and admission standards.</li> <li>Analyzed CSU and UC enrollment data to determine the transfer representation of new resident enrollees across the system, at each campus, and by discipline and major. To establish transfer representation among those students who ultimately graduated, we also performed similar analyses using CSU and UC degree data, to the extent it was available.</li> <li>Interviewed officials and documented relevant information to establish how CSU and UC and selected campuses use campus- or major-impaction as a factor in transfer admission. We also evaluated the effects of limited capacity on transfer admission.</li> </ul>
8	Review and assess any other issues that are significant to the audit.	<ul> <li>Evaluated major preparation articulation agreements for a selection of majors to identify gaps in articulation between the five selected community colleges and the four selected CSU and UC campuses.</li> <li>Interviewed ASSIST administrators and other system and campus officials about ways to improve ASSIST and the articulation process.</li> </ul>