

Options for a Forestry Management Training Center in Northern California

Summary

The *Supplemental Report of the 2021-22 Budget Act* requires our office to develop options for the Legislature to consider for creating a forestry management training center in Northern California. The language further expresses the Legislature's intent to consider approving the center during the 2022-23 state budget process. This report responds to the supplemental reporting requirement.

There are a wide range of forestry management jobs, which are generally focused on maintaining the health of forests and natural landscapes and reducing the risk of severe wildfires. The state supports several programs that provide forestry-related training. Some serve young adults, while others serve formerly incarcerated individuals. Some examples of forestry management jobs include: forestry technicians, Registered Professional Foresters, licensed timber operators, reforestation specialists, certified burn bosses, and environmental compliance professionals.

In this report, we discuss two key policy goals the Legislature might want to consider in establishing a new forestry management training center in Northern California—addressing workforce gaps and improving outcomes for targeted populations. As it considers various design options, it will be important for the Legislature to consider the relative importance it places on those goals. We further identify choices to consider when designing a training center, such as which forestry positions to target for training, the location of the center, and design elements that would affect the cost of the facility. Finally, we encourage the Legislature to consider whether other strategies—such as expanding an existing training program or implementing more robust recruitment efforts—could help meet its policy goals. These strategies could be implemented in addition to or instead of establishing a new training center.

INTRODUCTION

Report Responds to Supplemental Report Requirement. The *Supplemental Report of the 2021-22 Budget Act* requires our office to consult with the California Department of Forestry and Fire Protection (CalFire) and other appropriate stakeholders, including the California Conservation Corps (Corps), to develop options for the Legislature to consider for creating a forestry management training center in Northern California. The language further expresses the Legislature’s intent to consider approving the center during the 2022-23 state budget process.

Consulted With Various Departments and Stakeholders. Consistent with the requirements of the supplemental report language, we had discussions with CalFire and the Corps to help inform the preparation of this report. Additionally, we interviewed various other stakeholders, including the California Department of Corrections

and Rehabilitation (CDCR), forestry-related industry representatives and professional associations, other nonprofit organizations, a Resource Conservation District, and a couple other state agencies with an interest in forestry training. We also consulted several community colleges and California State University (CSU) campuses that offer forestry programs.

Report Includes Four Main Sections. This report consists of four main sections. First, we provide background on key existing state-supported forestry-related training programs, as well as recent legislation related to forestry training. Second, we summarize two potential policy goals for establishing a forestry management training center. Third, we discuss design choices and options for establishing such a center. Finally, we identify other strategies that the Legislature could consider to address its policy goals.

BACKGROUND

Different Types of Forestry Management Jobs

There are a wide range of forestry management jobs, which are generally focused on maintaining the health of forests and natural landscapes and reducing the risk of severe wildfires. Some examples of forestry management jobs include: forestry technicians, Registered Professional Foresters, licensed timber operators, reforestation specialists, certified burn bosses, and environmental compliance professionals. These positions serve different roles and require varying types and levels of training. For example, forestry technicians are entry-level forestry positions. They perform various activities, including serving on CalFire’s fuels reduction crews. It typically takes six months of education and/or experience to become a forestry technician. In contrast, Registered Professional Foresters are responsible for managing and supervising various types of forestry work, including work performed by forestry technicians.

Foresters perform activities such as planning for forest thinning projects, as well as identifying and planning for mitigation of environmental impacts related to those projects. It typically takes seven years of education and/or experience, as well as the successful passage of a licensing exam, to become a Registered Professional Forester. (For the purposes of this report, we assume that forestry management jobs do not include firefighting positions, which primarily are focused on fire suppression rather than forestry.)

Current Forestry-Related Training Programs

The state supports several programs that provide forestry-related training. Some serve young adults, while others serve formerly incarcerated individuals. (In addition to state-operated programs discussed in this report, there are a few forestry-related training programs operated by other entities—such as the private sector and federal government.)

Conservation Corps Trains Youth for Various Forestry-Related Positions. The Corps provides young adults (generally age 18 to 25) one year or longer of paid service to work on environmental projects and respond to natural disasters. The Corps operates out of 26 centers across the state, including both residential and nonresidential centers. The Corps can accommodate up to about 1,600 participants—known as corpsmembers—at any given time. Corpsmembers come from a variety of backgrounds, including being formerly incarcerated in some cases.

While in the Corps, corpsmembers have the opportunity to participate in educational and job training programs, though not all centers offer every program. The Corps' primary forestry training program is the Forestry Corps program in which corpsmembers gain experience implementing forest health and vegetation management projects. They have the opportunity to learn how to operate forestry-related equipment (such as chainsaws), and the Corps connects them to degree programs and jobs upon completion of the program. The Forestry Corps operates from four nonresidential (Chico, Napa-Solano, Pomona, and Inland Empire) and two residential (Tahoe and Greenwood) centers and has capacity for 90 corpsmembers at any given time. The state currently provides about \$5.3 million annually to support the Forestry Corps.

Various Higher Education Institutions Provide Forestry Training. California's higher education institutions offer a variety of programs that provide students with the opportunity to gain the skills necessary to secure jobs in forestry. For example, CSU Humboldt, CSU San Luis Obispo, and the University of California at Berkeley offer bachelor's degrees in forestry. These programs, which together grant about 100 bachelor's degrees per year, prepare students for a variety of forestry-related positions, such as becoming a Registered Professional Forester.

Additionally, eight community colleges offer two-year degree and/or certificate programs in forestry, and 55 offer them in fire technology or wildland fire technology. (These programs sometimes prepare students to be firefighters, as well as for forest management-related positions.) Together, these community colleges have granted about 100 forestry associate degrees and

certificates, as well as about 2,500 fire and wildland fire technology associate degrees and certificates annually in recent years. These degree and certificate programs prepare students for entry-level forestry jobs, among other things. For example, Shasta College in Redding offers a program in forest science and technology aimed at training graduates to be forestry technicians and other related jobs. Shasta College also offers a heavy equipment logging operations and maintenance certificate, which includes training on logging equipment, such as skidders. In some cases, higher education institutions partner with other entities to provide forestry training opportunities. For example, Reedley College (near Fresno) not only offers a two-year degree in forestry, but also is collaborating with a local conservation corps and workforce development board on a 20-week program to train young adults for vegetation management positions.

State Conservation Camps Train Inmate Hand Crews. CalFire and CDCR jointly operate 35 conservation camps in 25 counties across the state. Inmates in the program live in a conservation camp rather than in a state prison. Inmates assigned to the program perform a mix of firefighting and forest management-related work. This includes serving on hand crews, which help fight fires by performing tasks such as cutting "fire lines"—gaps where all fire fuel and vegetation is removed—with chain saws and hand tools. They also mitigate the severity of wildfires by conducting vegetation management projects. Inmates must meet certain conditions to be eligible to be on hand crews, such as related to their fitness and the nature of the crimes for which they were convicted.

Conservation camp participants receive roughly three weeks of basic training on topics such as wildland fire safety and attack, hand tool use, teamwork, and crew expectations. Once assigned to a hand crew, inmates continue to receive training in things like cardiopulmonary resuscitation and emergency response, with some progressing to more responsible positions on the crew, such as a chainsaw operator. The experience that participants gain can serve as qualifying experience for certain forestry-related positions, such as the state's forestry technician classification. As of December 2021, there were about 1,675 inmates housed in conservation camps.

Ventura Training Center (VTC) Trains Former Inmates. As part of the 2018-19 budget, the state funded the conversion of the Ventura conservation camp in Camarillo into a new residential center—called VTC—co-managed by the Corps, CalFire, and CDCR. The program offers a firefighter training and certification program for parolees so that at the end of the 18-month program, participants are fully trained firefighters eligible to be hired by firefighting agencies. While the main focus of the program is firefighting, participants perform activities such as fuel reduction and reforestation projects when not fighting fires. The program is designed for parolees because one of the main goals of the center is to reduce recidivism. In order to help achieve this goal, the state contracts with a nonprofit organization to provide participating parolees with life skills training, reentry and counseling services, and job placement assistance. VTC is designed to serve 80 parolees at a time. When it first opened in fall 2018, VTC was not at full capacity. However, the eligibility rules for the center were expanded, and CalFire now reports that the center is at capacity. The annual operating cost for VTC is roughly \$6.3 million.

State Supports Reentry Programs, Including Related to Forestry. The state supports various programs to provide former inmates with services upon release from prison with the goal of reducing recidivism. For example, the Board of State and Community Corrections administers the Adult Reentry Grant (ARG) program, which provides funding for community-based organizations to deliver reentry services for people formerly incarcerated in state prison. A recent ARG grantee is the Forest and Fire Recruitment program, which is a nonprofit organization that provides current and former conservation camp participants training and career support to help them secure jobs in forestry and fire suppression. Currently, the program operates four crews in Southern California, including in Los Angeles, San Bernardino, and Ventura Counties.

Recent Legislation to Support Forestry Training

Reentry Program Approved to Train Former Inmates in Forestry. Chapter 587 of 2019 (AB 1668, Carrillo) authorized the Corps, subject to appropriation, to establish a program to train former inmates for positions in forestry. To date, no funding has been appropriated to implement the law, so the program has not yet been launched.

Legislature Recently Passed Bills Related to Creating Forestry-Related Training Centers. In 2021, the Legislature passed two bills related to forestry training centers. First, SB 804 (Glazer), which would have established, subject to appropriation, a forestry training center in Northern California. This center would have prioritized enrollment of former inmates that participated in the conservation camp system. The goal of the center was two-fold: (1) to reduce the risk of destructive wildfires by training people for entry-level forestry and vegetation management positions and (2) to provide a pathway to employment for formerly incarcerated individuals. The analysis of the bill prepared by committee staff based on information from the Corps estimated it would cost about \$65 million from the General Fund or bond funds to construct a residential center (or between \$20 million and \$30 million to renovate an existing facility), as well as about \$11 million annually from the General Fund to operate a training program at the center for about 80 participants. The Governor vetoed the bill citing a desire to consider such a center through the budget process.

Second, the Legislature passed and the Governor signed Chapter 375 of 2021 (AB 642, Friedman). Among other things, this law requires the State Fire Marshal, by July 1, 2023, to develop a proposal to establish a prescribed fire training center. This proposal is required to include certain components, such as the identification of potential funding sources and locations for the establishment of a center.

POTENTIAL GOALS FOR NEW TRAINING CENTER

Before it establishes a new forestry management training center, a key first step for the Legislature to undertake is to identify what its main policy goals are for the center. The specific priorities that the Legislature chooses and the relative importance it places on each goal could fundamentally change the design of a new training center. In particular, we find that the Legislature would want to consider the degree to which the purpose of the center is to (1) address workforce gaps or (2) assist specific target populations.

Addressing Forestry-Related Workforce

Gaps. A workforce gap is when there are insufficient qualified workers available to fill the open positions. To the extent that significant workforce gaps exist or are anticipated to emerge in the near future, there is an argument for the state to help address them given the statewide importance of reducing the risk of destructive wildfires. This is because destructive wildfires can impose a variety of negative impacts on the state, including threatening lives and property, worsening air quality, destroying natural resources, and resulting in significant state costs associated with wildfire suppression and recovery. If addressing workforce gaps is a primary goal of the program, it could affect the design of the program in important ways, such as the type of positions for which the center trains, the location of the center, and the size of the center.

As we discuss in more detail later in this report, we were only able to find limited data on forestry-related workforce gaps. However, in our

discussions with stakeholders, we heard that there are insufficient trained forestry personnel to meet the demand in the state. This concern is echoed in some recent reports that we reviewed, including one prepared by the North State Planning and Development Collective at CSU Chico. Additionally, to the extent that the state and/or federal government accelerate their funding of vegetation management projects in the coming years to enable them to meet a jointly agreed to goal of treating a total of 1 million acres annually, the demand for qualified personnel to help complete projects could increase. This, in turn, could potentially exacerbate any existing workforce gaps.

Improving Outcomes for Targeted Populations.

There also could be a state interest in improving the employment and other outcomes for certain targeted participants. If this was the primary goal of the new center, it could affect the design of the program, including not only the eligible participants, but also the size, location, and training curriculum. For example, if the Legislature's priority was for the center to serve the formerly incarcerated—similar to VTC—it could provide potential employment benefits for participants, which could contribute to the state's goal of reducing recidivism. Improving employment and recidivism outcomes could, in turn, result in direct and indirect fiscal benefits to the state, which could offset some or all of the costs of the program. These potential fiscal benefits include reduced incarceration, crime victim assistance, and public assistance costs.

DESIGN CHOICES AND OPTIONS FOR A TRAINING CENTER

Key Design Choices for Creating Training Center

There are a variety of choices regarding how to design a forestry management training center. The Legislature will want to address each one of

these design choices if it elects to establish a new center. (We also discuss alternative strategies for addressing the Legislature's policy goals later in this report.) As we discuss below, within each category of choices, the Legislature faces various decisions, which would depend in part on the relative weight it

assigns to the potential policy goals for the center. Notably, decisions about some design choices could impact decisions on other choices.

Forestry Positions to Target for Training.

A key choice when establishing a training center is which forestry-related positions to target for training. If a main goal of the center is to address workforce gaps, it would be important to consider which positions are in greatest need by employers, as well as the extent to which existing training programs already target those positions. Jobs with high vacancy rates and/or relatively few training programs available could potentially benefit from the creation of a new forestry management training center.

In our review, we found only limited information on the specific positions with unmet needs. For example, we found a regional analysis for the Central Valley that identified that there is an undersupply of 1,400 fire management and forestry workers in the region. However, we did not find statewide information. Importantly, additional information on workforce needs may be forthcoming. For example, the Governor's Forest Management Task Force's *Wildfire and Forest Resilience Action Plan* tasks CalFire with quantifying the current and projected unmet needs for forestry-related workers by job type and location to inform the state's investments in training and vocational programs. At the time our report was prepared, CalFire reported that it was nearing the completion of the study.

Alternatively, if the main goal of the center is to improve outcomes for a targeted population, that could also affect the positions to target for training. For example, the formerly incarcerated are less likely to have the educational background required for some positions, such as Registered Professional Foresters. Therefore, it likely would not make sense to focus the program on training those positions.

Intended Participant Population. Another key choice when establishing a forestry management training center is identifying the group to target for training, whether the general population or a specific population of interest. If the primary goal of the training center is to meet workforce needs, it could make sense for the center to be open to the general population rather than restricted to training

a specific population. However, if a main goal of the center is to improve participant outcomes for a specific population, such as at-risk youth or parolees, then it would make sense to prioritize eligibility to those specific individuals. We also note if the Legislature wanted to address both goals, it could consider making the training center open to the general population, but providing the population of interest with additional support, such as counseling services or job placement assistance.

As described above, the state currently operates a number of forestry-training programs targeted to specific populations. Information on the outcomes of these programs could help inform the Legislature about whether modeling a new center after these programs would be effective. Unfortunately, there is limited information on how effective these programs are at improving participant outcomes. For example, in April 2021, the Corps released the first of recently required annual reports on the outcomes of its programs for young adults. However, it is difficult to draw conclusions about the effectiveness of the program from the report for a few reasons. First, it is based on only data from one cohort of corpsmembers. Second, the report does not compare participants in Corps programs with similar youth who did not participate. So, it is difficult to gauge how much the Corps improved the outcomes for youth that participated. Third, the report does not break out information on the Forestry Corps program, specifically. Thus, it is unclear whether the outcomes of that program differ from the outcomes of other Corps programs.

The information on the outcomes of participants in VTC is promising thus far, showing that most graduates appear to secure employment upon completion of the program and have a low rate of recidivism. However, the center has only been in operation a couple of years, initial enrollment was low, and the current data has not been compared to a statistically relevant comparison group. Therefore, it would be premature to draw conclusions about the effectiveness of the program based on this information. According to CDCR, VTC's nonprofit contractor is expected to provide reports on the program starting no sooner than 2023. These reports are anticipated to include information on the number of parolees that have graduated from

VTC and are employed by fire agencies, along with their recidivism rates, as compared to overall post-incarceration recidivism rates. When available, these reports could provide worthwhile data on the program's effectiveness.

Residential or Nonresidential Facility.

Another important choice is whether the center will be residential or nonresidential. A residential center likely would be more expensive because it would require one-time costs for the construction of a larger facility that includes housing and related amenities, as well as additional annual costs associated with operating and maintaining those facilities. For example, the Corps reports that the operating costs for its residential centers can be just over twice the costs for its nonresidential centers.

While a residential facility would be more expensive, it could have advantages in certain cases, such as if the center were to be located in an area that has few local housing options—such as in rural areas—or if housing would be prohibitively expensive for participants. A residential training program also might make sense if it was designed to serve populations that might otherwise lack access to stable housing and supportive services, such as parolees or at-risk youth. In theory, providing a residential program could provide enhanced programs for participants, which potentially could translate into improved outcomes. However, the extent to which this is the case in practice is not clear. For example, the April 2021 Corps report provided information on the short-term outcomes for one cohort of participants in the department's existing residential and nonresidential centers. This report did not provide clear evidence that the outcomes of its residential centers are better than those of its nonresidential centers.

Build New or Utilize Existing Sites and Facilities. It also is important to consider how the center should be constructed. Some options that the Legislature could consider include:

- ***Building an Entirely New Facility.*** A facility could be built from the ground up on an undeveloped parcel.

- ***Repurposing a Vacated Facility.*** An existing but vacated facility could be modified and repurposed to create a center. For example, in our conversations with departments, we heard about a few examples of sites that could be considered, such as a site in San Mateo County that previously housed low-risk county offenders and a utility district site in the East Bay.
- ***Use a Portion of an Existing Facility or Site.*** For example, the center could be co-located at an existing facility—such as at an existing community college—which could mean relatively modest construction work would be needed.

There are trade-offs associated with each of these potential choices. Building an entirely new facility likely would be the most expensive choice—potentially several tens of millions of dollars in construction funding—and require at least a few years to plan and construct. For example, in recent years, there have been several proposals to construct new Corps residential centers with a couple of estimated project costs exceeding \$40 million. While expensive, this choice would provide the greatest flexibility regarding the design and location of the center.

Repurposing and renovating a vacated facility likely would cost less than building a new facility because it could utilize some of the existing buildings and infrastructure. However, it would rely on finding a vacated site in a suitable location, and the project would still likely take a few years and potentially cost in the low tens of millions of dollars to construct. For example, creation of VTC involved the renovation of a vacated conservation camp facility and cost roughly \$19 million to complete.

Using a portion of an existing facility has the potential to be the least expensive and fastest option of the three approaches, particularly if the facility does not require substantial modifications or improvements. However, using a portion of an existing facility would limit the potential locations of the center and its capacity (unless the existing facility was expanded).

Location for Training Center. Another key choice is where geographically to locate the center within Northern California. As the Legislature considers potential geographic locations for a center, some key things to keep in mind include:

- **Proximity to Treatable Landscapes.** There are advantages to locating the center close to forests or other vegetation types that can provide hands-on training and work opportunities for participants.
- **Ability of Location to Attract Sufficient Participants.** Some locations—such as those near major population centers—might be have access to more people from which to recruit.
- **Availability and Cost of Appropriate Sites.** As discussed above, particularly if the Legislature would like to consider repurposing a vacated site or co-locating the center at an existing facility, the availability of appropriate sites and facilities might place some limitations on the geographic location of the center. Additionally, some sites could be more expensive to acquire than others depending on factors such as nearby land values.

There are likely to be trade-offs among these characteristics. For example, forested areas can provide important opportunities for students to learn key forestry skills. However, many forested areas are remote, which could make it harder for them to attract participants. Attracting participants could be a more significant consideration if the center is limited to a relatively narrow population—such as parolees that previously served in a conservation camp—than if it were designed to serve a broader population.

Size of Center. Another choice for the Legislature to keep in mind is the size of the center. When determining the size of the center, some key factors to consider include:

- **Size of Workforce Needs.** The center should be sized based in part on the size of the workforce needs, including by state, federal, local, and private employers. As we discuss above, there is only limited data regarding the size of these needs. It would be important, for example, to make sure that the training center does not produce more trainees than

are expected to be able to secure positions in the forestry field.

- **Number of Eligible Participants.** For example, if the center were limited to former conservation camp participants or other parolees, the potential number of participants would be more limited than if the center is open to the general population. As evidenced by the initial challenges filling VTC to capacity, not all parolees would necessarily be interested in participating in and/or eligible to participate in a training center depending on the requirements that are established.
- **Cost Considerations.** It also is important to consider the size that can be managed cost-effectively. For example, there could be some fixed costs associated with running a center—particularly if it were to be a residential center—so there may be a minimum size below which the per-participant cost would be prohibitive. For reference, according to the Corps, 80 students is the ideal size for the department to manage as a residential center. However, other cohort sizes could make sense under other models, such as in collaboration with a community college or other higher education institution.

Duration of Program. It also is important to consider the length of the program offered at the center—which could potentially range from a few months to one year or more. The optimal length of the program would depend in part on the positions for which the center is providing training. This is because some types of forestry-related positions—such as Registered Professional Foresters—require significantly more training than others, such as forestry technicians.

The ideal length of the program would also depend on the existing background of the participants. For example, former participants in the inmate conservation camps have already received some basic training and have experience serving on hand crews. Depending on the length of time they have served in the conservation camps, these individuals might need only a small amount of additional training and/or experience to qualify for entry level forestry positions, such as the state's forestry technician classification.

Notably, all else equal, longer programs generally are more costly to provide on a per-student basis than shorter programs. Additionally, they require more significant time commitments on the part of participants. Accordingly, it would be important to make sure that the program is designed to give the necessary training, but without requiring students to participate in a longer program than is required to meet their career goals.

How Center Would Be Funded. Another choice for the Legislature is how to fund the center. Several different options include (1) the state General Fund (with construction costs either directly funded or through bonds), (2) reimbursements for forestry-related work completed by participants while they are in the program, (3) tuition or fees charged to participants, (4) grants or donations, and/or (5) matching funds from other governmental agencies or partners that might hire the participants following completion.

The funding model that makes the most sense likely would depend in part on the Legislature's other decisions about how to design the center. For example, if the center were designed as a partnership with a community college, the capital costs for facility improvements could potentially be matched by local bond funds if local residents saw the benefits of locating such a center in their community. Additionally, under that model, most or all of the operating costs could be funded from the college's existing funding sources, known as apportionments. (Apportionments come from a combination of state General Fund [Proposition 98], local property taxes, and enrollment fee revenue.)

Also, if students were to perform work for nonstate entities while at the center, a reimbursement model could be considered to help fund the center's ongoing operations. In addition, if participants were anticipated to help address nonstate (private sector, local, or federal) workforce needs, it could be appropriate for prospective employers to partner in funding the center since they could benefit from the program's success. (Prospective employers in some other fields—such as information technology and healthcare—sometimes support training programs.)

Which State Entity Manages Center. It also is important to consider which entities should have a role in managing the center. The entities involved would depend in part on the other decisions that the Legislature makes about how to design the center. For example, if the Legislature chooses to co-locate the center at a community college, it would likely make sense for the college to manage the center (potentially in collaboration with other relevant entities, such as CalFire). If, however, the Legislature chooses to build a stand-alone residential center, it could make sense for the Corps to have a key role given its experience managing similar residential centers. In this case, the Corps could collaborate with CalFire and, if the center were to serve parolees, CDCR.

Implement as a Pilot or Permanent Center. Another choice is whether the Legislature wants to create the center on a pilot basis or on a permanent basis. Creating the center on a pilot basis would provide a chance to try and evaluate approach(es) before committing to creating a new center on a permanent basis. This could be valuable given the limited information available around workforce gaps and the effectiveness of existing programs to guide decision-making. However, a downside to undertaking a pilot would be that it could be difficult to do for approaches that have large capital or other start-up costs. Thus, a pilot would likely make more sense as an option to consider for a program that would be co-located at an existing facility rather than one that would require building a new facility or making substantial capital improvements to an existing one.

How Soon Should Program Be Approved and Operational. A final design choice is the amount of time before the center is launched, which would depend on a couple of factors. First, it could depend upon when the Legislature approves the creation of the center. A rationale for approving the center as soon as possible could be to accelerate the number of forestry professionals that could be trained and available to fill workforce gaps and meet the state's forestry and fire protection needs. However, the state might want to wait until additional information is available to help inform decisions regarding how to structure the center. Specifically, it would be helpful to have (1) CalFire's

forthcoming quantification of forestry workforce needs and (2) additional information on outcomes from VTC. Information from VTC would be particularly valuable if the Legislature is considering serving a formerly incarcerated population similar to VTC.

Second, it would depend on how long it takes from legislative approval until the center can be operational. This would depend in part on the Legislature's decisions regarding how to design the center. For example, a program that requires new facilities could take several years to get off the ground, whereas a program that uses existing facilities with few modifications could be launched more quickly.

Options for Designing New Training Center

As described above, the Legislature would have many choices to make—including which workforce gap to target, eligible participants, size, and location—if it decided to establish a new training center. Given the number of combinations of choices, the Legislature has dozens of potential design options it could consider. For example, if the Legislature's main goal is to meet a workforce need, one hypothetical option that could make

sense is to create the center in partnership with a community college or other higher education institution that has existing experience providing similar training programs. This option could utilize—and potentially expand—the existing facilities at the campus to provide additional hands-on training that could result in the award of additional certifications or degrees. The Legislature could determine what specific roles and responsibilities to give to the center and what level of additional financial resources to provide it, depending on factors such as the number of students the Legislature wants the center to serve and whether the state would like to offset some or all of the tuition or materials costs that participants would otherwise incur.

Alternatively, if the primary goal is to assist a targeted group such as former inmates at risk to recidivate, it could make sense to consider other hypothetical options, such as creating a new residential center that could provide housing stability for and services to participants. Notably, the various options would likely come with trade-offs, including different costs. For reference, the state funds community college instructional programs at a rate of roughly \$6,000 per full-time equivalent student, which is significantly less than the roughly \$70,000 required to support each new residential corpsmember.

OTHER STRATEGIES FOR ADDRESSING GOALS

As required the by the supplemental report language, we discuss options for creating a new training center above. However, our research and discussions with stakeholders suggest that there might be other strategies the Legislature could employ to address its policy goals, including (1) expansion of existing programs rather than creating a new program, (2) implementation of other strategies to address workforce gaps, and (3) implementation of other evidence-based recidivism reduction programs.

Expand Existing Programs. Whether it makes sense to expand an existing program would depend on factors such as the Legislature's goals and available information on the effectiveness of existing programs. Generally, it could make sense to expand

existing programs to the extent that the state has such programs and they are considered to be cost-effective. For example, if the Legislature's main goal is to meet workforce gaps, there are a number of existing programs that provide forestry-related training that could be expanded. As discussed earlier, there are a number of existing forestry-related programs at the state's community colleges, and these programs are relatively affordable for the state to provide (roughly \$6,000 per year per student). We note that community colleges currently are serving significantly fewer students than they are being funded for and have significant discretion in deciding which instructional programs to grow.

Similarly, if the Legislature's primary goal is addressing the employment or other needs of specific populations, it could make sense to expand one of the existing programs targeted towards those groups, such as the Corps or VTC. However, as discussed earlier in this report, the state does not have clear data on the effectiveness of those programs, making it difficult to know whether expansion would be a cost-effective strategy. In the coming years, existing reporting requirements could provide such information.

Alternatively, to the extent that the state lacks an existing program that addresses the Legislature's goals, or the existing programs are found to be ineffective, that could argue for the creation of a new program.

Implement Strategies to Address Other Causes of Workforce Gaps. It is unclear based on available information if a lack of training capacity is a primary cause of the state's forestry workforce gaps. Therefore, if the Legislature's goal is to expand the forestry workforce, it might want to consider other workforce development strategies in addition to establishing a training center. The optimal mix of strategies likely depends on the main barriers that exist to attracting and retaining sufficient forestry management practitioners, which could be informed by information from future workforce studies currently under development. For example, to the extent that it is determined that there are not enough students applying to existing forestry training programs, the state could support expanded recruitment efforts for these programs. Alternatively, to the extent that it can be

determined that current pay scales are a primary barrier to attracting and retaining forestry staff, the state could explore changing certain state job classifications to expand eligibility or increase pay scales to make the jobs more attractive. (For example, CalFire and the California Department of Human Resources currently are funded to study the possible creation of a new classification to staff state-staffed hand crews instead of Fire Fighter I's.) To the extent that future workforce studies do not identify the main barriers to attracting and retaining sufficient practitioners, this could be a topic that would benefit from further analysis.

Implement Other Evidence-Based Recidivism Reduction Programs. If the Legislature's main goal for a center is to reduce recidivism, it could instead consider implementing other, non-forestry-related programs that have been shown to accomplish this goal cost-effectively, including some programs that are employment-related. (We discuss the evidence for various types of recidivism reduction programs in our 2017 report [Improving In-Prison Rehabilitation Programs](#).) Notably, while preliminary data from VTC is generally positive, it is an expensive program, costing over \$100,000 per participant in the 18-month program. Thus, it could be more cost-effective for the state to dedicate funding to other, less expensive programs aimed at reducing recidivism rather than creating a residential training center like VTC. Dedicating funding to the most cost-effective programs is important because it would allow the state to serve a greater number of individuals with the same amount of funding.

CONCLUSION

In this report, we have identified two main potential goals for establishing a new forestry management training center—addressing workforce gaps and improving outcomes for targeted populations. It will be important for the Legislature to consider the relative importance it places on those goals as it considers the various options for designing a center. In particular, determination of its goals should influence key design choices—such as

the targeted workforce gaps, participants, size, and location of the center—as well as its construction and operational costs and how it would be funded. Additionally, we encourage the Legislature to consider whether other strategies—such as expanding an existing training program—could meet its goals, either in addition to or instead of establishing a new training center.

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This report was prepared by Helen Kerstein, and reviewed by Brian Brown and Anthony Simbol. The Legislative Analyst's Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature. To request publications call (916) 445-4656. This report and others, as well as an e-mail subscription service, are available on the LAO's website at www.lao.ca.gov. The LAO is located at 925 L Street, Suite 1000, Sacramento, California 95814.