# **2021 SIX-YEAR PLAN NARRATIVE (Part II)**

**INSTITUTION:**  Virginia State University

Cooperative Extension and Agriculture Research Services (234)

**OVERVIEW**

The totality of the six-year plan should describe the institution’s goals as they relate to state goals found in the *Pathways to Opportunity: The Virginia Plan for Higher Education*; the Higher Education Opportunity Act of 2011 (TJ21); and the Restructured Higher Education Financial and Administrative Operations Act of 2005.

The instructions under institutional mission and alignment to state goals, below, ask for specific strategies, in particular related to equity, affordability and transformative outcomes. Other sections will offer institutions the opportunity to describe additional strategies to advance institutional goals and state needs. ***Please be as concise as possible with responses and save this narrative document with your institution’s name added to the file name.***

**SECTIONS**

**Section A. Pandemic Impact:** Briefly discuss, in one to two paragraphs, how the pandemic has impacted your institution. What things did your institution already have in place that proved helpful? What lessons were learned? What short-term changes have been made? What long-term changes will be made? What are the concerns moving forward?

**RESPONSE:**

**Section B. Institutional Mission, Vision, Goals, Strategies, and Alignment to State Goals:** Provide a statement of institutional mission and indicate if there are plans to change the mission over the six-year period.

Provide a brief description of your institutional vision and goals over the next six years, including numeric targets where appropriate. Include specific strategies (from Part 3 – Academic-Financial Plan and Part 4 – General Fund Request) related to the following state themes and goals:

* **Equitable:** Close access and completion gaps. Remove barriers to access and attainment especially for Black, Hispanic, Native American and rural students; students learning English as a second language; students from economically disadvantaged backgrounds; and students with disabilities.
* **Affordable:** Lower costs to students. Invest in and support the development of initiatives that provide cost savings to students while maintaining the effectiveness of instruction.
* **Transformative:** Expand prosperity. Increase the social, cultural and economic well-being of individuals and communities within the Commonwealth and its regions. This goal includes efforts to diversify staff and faculty pools.

Strategies also can cross several state goals, notably those related to improved two-year and four-year transfer, and should be included here. If applicable, include a short summary of strategies related to research. The description of any strategy should be one-half page or less in length. Be sure to use the same short title as used in the Part 3 and Part 4 worksheets. If federal stimulus funds will fund activities and are included in Part 3 as reallocations, please note how they will be used.

**RESPONSE:**

Cooperative Extension and Agriculture Research Services Agency of Virginia State University play an important role in Virginia’s Land Grant System.

**Mission**: Virginia State University and Virginia Tech, a collaborated partnership that constitutes agricultural research and extension outreach and engagement (Virginia Cooperative Extension), enable people to improve their lives through research and education using scientific knowledge focused on the issues and needs of the citizens of the Commonwealth.  In alignment with the university’s mission, the College of Agriculture’s mission is to improve the educational and socio-economic well-being of students, families and communities – focusing on excellence through integrated instruction, research and extension programs.

Virginia State University demonstrates its commitment to the preparation of a diverse population of men and women through the advancement of academic programs and services that integrate instruction, research, extension and outreach. The university faculty, staff and administrators have engaged in the development of a six-year plan that includes a number of strategies and initiatives to meet the University’s six strategic priorities, one of which is to **“Enhance the Land Grant Mission of Virginia State University”.** The strategies presented in this six-year plan are aligned with Virginia State University’s 2020-2025 Strategic Plan and embedded in the three goals associated with the Statewide Strategic Plan (SSP) for Higher Education.

Statewide Strategic Plan Goals:

 Goal 1: Equitable: Close Access and Completion Gaps

 Goal 2: Affordable: Lower Costs to Students

 Goal 3: Transformative: Expand Prosperity

**Enhance the Land Grant Mission of Virginia State University.**

STATE GOAL 3: Transformative: Expand Prosperity (S8: Support, S9: Improve, S10: Cultivate)

1. **Urban Agriculture Certificate Program** - To help meet the demand for academically trained urban agriculture professionals, VSU’s College of Agriculture began offering an Urban Agriculture Certificate Program in 2017. Designed for anyone charged with starting or managing an urban farm or anyone who wants to increase their marketability to do so, the course provides a curriculum rich in the science-based knowledge needed to successfully and safely grow produce in an urban environment. Courses include: plant propagation and nursery management, plant disease and pest management, sustainable soil management, greenhouse production (hydroponic and aquaponic), animal husbandry (chickens and rabbits), and more. All courses will be taught by Virginia State University (VSU) and Virginia Tech professors. Each of the 10 sessions include classroom work, plus hands-on lab and field work at VSU’s Randolph Farm and the VSU Summerseat Urban garden project. Small class sizes allow for personalized attention for each student to master the foundational principles to plan, manage and profit from an urban farm business. The course is suitable even for those who have had gardening training before, such as Master Gardeners, as it will contribute to their continuing education credits. This strategy is a continuation from the previous Six-Year Plan and will operate off participant cost recovery per registration fees.
2. **Harding Street Indoor Urban Agriculture Outreach and Engagement Center -** Virginia State University is working to bring fresh food to Petersburg residents through the Harding Street Community Center. The indoor urban farm opened in summer 2015, and is currently using indoor growing techniques to provide produce and fish to city residents who will then be given the skills to start their own gardens. Harding Street continues to undergo renovations and expansion and now offers healthy food preparation and nutrition education courses on-site. Also, outdoor gardens have provided a mechanism to produce food for community residents. Harding Street has phased to serve as an incubator space for indoor agriculture production. This strategy is a continuation from the previous Six-Year Plan and will operate per existing program dollars and grant funds.
3. **Specialty Crop Research -** The Agricultural Research Station (ARS) Plant Science Program and the Cooperative Extension Program strive to evaluate and promote new alternative and specialty crops that will provide a greater return on investment for farmers. Consumers are demanding food that enhances their health and protects them from chronic diseases. Specialty crops that can be grown in small areas but are profitable and market oriented toward the consumers demand. In their various efforts, faculty strive to find new uses for plant products that increase the income of small farmers. The ARS has well-established research programs in the following areas: vegetable soybean/edamame, flax, turmeric, sorghum, black bean and navy bean. Cooperative Extension has well-established research programs in berry production, ginger, and intensive vegetable production. All are explored as potential alternative cash crops for former tobacco farmers in Virginia. Both ARS and Cooperative Extension continue to research and educate Virginia residents about new ways to produce and earn money from viable, marketable specialty crop production. This strategy is a continuation from the previous Six-Year Plan and will operate per existing program dollars and grant funds.
4. **Hops Research to support Virginia Agribusiness Development** – In response to a growing craft beer industry and an increase in consumer demand for local products, ARS scientists are currently researching the growth of hops (*Humulus lupulus* L.) for use in locally brewed beer. Cultivar trials and associated research on hops at Randolph Farm has been going on since 2017. The potential of non-cone biomass, a by-product, as animal food has been examined. An evaluation of low trellis hop production conducted as part of an effort to identify cheaper production methods suited to limited resource stakeholders is underway at VSU. It is of primary interest as to its potential relative to hops production in Virginia and the eastern United States. Other areas of investigation on hops include postharvest handling and processing techniques, quality and insect pest and disease interactions. This strategy is a continuation from the previous Six-Year Plan and will operate per existing program dollars and grant funds.
5. **Industrial Hemp Research to support Virginia Agribusiness Development** - Virginia State University (VSU) has been involved in industrial hemp research since the imple­mentation of a pilot research program in Virginia in 2015. Since then, there is a growing interest in industrial hemp production by growers and processors in the Commonwealth of Virginia. The num­ber of growers/processors and acreage of industrial hemp is increasing in Virginia. In spite of the demand and interest, there are several challenges associated with industrial hemp production in Virginia. The most important challenge is the availability of seed for planting because there are no public varieties available in the United States. Virginia State University has established a long-term public hemp-breeding pro­gram to produce industrial hemp varieties for growers in Virginia and the United States. Research has been initiated as well to investigate the potentials of industrial hemp seed as a source of plant protein. Industrial hemp seed protein represents an alternative plant protein source because of its desirable nutritional quality. Hemp seed protein is characterized by unique essential amino acids profile and excellent digestibility. This strategy is a continuation from the previous Six-Year Plan and will operate per existing program dollars and grant funds.
6. **Small Farm Outreach to Small and Limited Resource Farmers** - The Virginia State University’s Small Farm Outreach Program (SFOP) provides outreach, training, and technical assistance to more than 2,000 small, limited-resource, and socially disadvantaged farmers and ranchers to improve the profitability and sustainability of farming enterprises. SFOP demonstration projects have helped farmers and students learn about the production of high value products through cost-efficient and environmentally friendly techniques to maximize profits. Demand for SFOP assistance, across Virginia, has outpaced program resources, personnel and operating dollars. State appropriations utilized to support this program currently stand at $394,000 annually. To expand the highly successful program’s operational footprint within the Commonwealth, additional funds are needed to maximize the training and technical assistance offered to Virginia’s small, minority, limited-resource, socioeconomically disadvantaged and military veteran farmers and ranchers, as well as, ensure the sustainability and profitability of their farm businesses. Agency 234 is requesting funds for: five Regional Small Farm Agents - $411,000 ($60K + fringe benefits (37%) = $82,200 x 5); five vehicles (pick-up trucks) - $150,000; and computers/printers/cell phones = $22,500. This strategy is a continuation from the previous Six-Year Plan.
7. **STEM Education through AgDiscovery and 4-H STEAM Programs** - The Agricultural Research Station and Cooperative Extension collaborate with hosting the AgDiscovery Summer Enrichment Program. AgDiscovery is a USDA-APHIS-funded program for teens who are interested in agriculture and related sciences, and VSU is one of seventeen universities across the U.S. to host the AgDiscovery program. VSU’s AgDiscovery program focuses on the animal, veterinary and food sciences. Each year teens, ages 14 to 17, work closely with VSU faculty and staff, both on campus and at Randolph Farm, and participate in hands-on activities with our Aquaculture, Small Ruminant, and Food Science researchers. Cooperative Extension conducts extensive 4-H STEAM program throughout Virginia. A collaboration with Virginia Tech produced a “Mission to Mars Base Camp” curriculum that has been picked up by National 4-H. An expansion of this curriculum into complimentary areas is currently underway. This strategy is a continuation from the previous Six-Year Plan and will operate per existing program dollars and grant funds.
8. **Providing Experiential Learning Opportunities to Virginia State University Students** – Agricultural Research Station (ARS) provides valuable experiential learning opportunities in food science, animal science, biotechnology, agronomy, and soil science for VSU undergraduate and graduate students. Student workers gain vital hands-on training preparing them for graduate studies or to enter the job market. ARS faculty serve as undergraduate major advisors and as committee members for graduate student thesis. Cooperative Extension is working to build an internship program to further support this initiative. This strategy is a continuation from the previous Six-Year Plan and will operate per existing program dollars and grant funds.
9. **Small Ruminant Research and Outreach Program –** The growth and expansion of the goat meat industry is challenged by a number of animal health issues. Parasitic and other enteric diseases in young growing animals are at the top health issues impacting the industry. Farmers in Virginia also face a shortage of affordable quality forages for their meat goats. To assist farmers in overcoming this problem, VSU researchers are investigating the usage of plant by-products as an affordable and readily available feed source for goats. In addition, research and extension faculty collaborate to increase producer knowledge and awareness on best management practices in meat goat production (kid management, disease prevention, understanding and prevention of zoonotic diseases) by hosting workshops and field days. Cooperative Extension at VSU, has designed and built a mobile slaughter processing unit to educate and enhance profitability of Virginia’s small ruminant industry. The unit is complete, and a certification course in partnership with Virginia Department of Agriculture and Consumer Services is under development for small-scale producers. This strategy is a continuation from the previous Six-Year Plan and will operate per existing program dollars and grant funds.
10. **Community, Food Access, Health & Nutrition Program –** CooperativeExtension is redesigning and refocusing program efforts relative to health, nutrition and food access. Programming will take on a more integrated approach to issues that span across nutrition, health, and food access throughout the communities across Virginia. Pre-existing programs and collaboration with Virginia Tech will provide a strong foundation.This strategy is new to the previous Six-Year Plan and will operate per existing program dollars and grant funds.

**Section C. In-state Undergraduate Tuition and Fee Increase Plans:** Provide information about the assumptions used to develop tuition and fee information the institution provided in the Excel workbook Part 1. **The tuition and fee charges for in-state undergraduate students should reflect the institution’s estimate of reasonable and necessary charges to students based on the institution’s mission, market capacity and other factors.**

**RESPONSE:**

N/A

**Section D. Tuition and Other Nongeneral Fund (NGF) Revenue:** Provide information about factors that went into the calculations of projected revenue, including how stimulus funds may mitigate tuition increases.

**RESPONSE:**

N/A

**Section E. Other Budget Items:** This section includes any other budget items for which the institution wishes to provide detail. Descriptions of each of these items should be one-half page or less.

**RESPONSE:**

N/A

**Section F. Enrollment Projections:** Include in this section information about how your institution developed its enrollment projections, whether your institution is concerned about future enrollment trends, and, if so, what planning is underway to address this concern. How have enrollment plans been impacted by the pandemic? For example, does your institution plan on enrolling more online students?

**RESPONSE:**

N/A

**Section G. Programs and Instructional Sites:** Provide information on any new academic programs, including credentials and certificates, new instructional sites, new schools, or mergers supported by all types of funding, that the institutions will be undertaking during the six-year period. Note that as part of the revised SCHEV program approval process, institutions will be asked to indicate if a proposed new program was included in its six-year plan. Also, provide information on plans to discontinue any programs.

**RESPONSE:**

N/A

**Section H. Financial Aid:** Discuss plans for providing financial aid, not including stimulus funds, to help mitigate the impact of tuition and fee increases on low-income and middle-income students and their families, including the projected mix of grants and loans. Virginia’s definitions of low-income and middle-income are based on HHS Poverty Guidelines. A table that outlines the HHS guidelines and the definitions is attached.

**RESPONSE:**

N/A

**Section I. Capital Outlay:** Discuss the impact, if any, that the pandemic has had on capital planning, such as decreasing the need for space or other aspects. Provide information on your institution’s main Education and General Programs capital outlay projects, including new construction as well as renovations that might be proposed over the Six-Year Plan period that could have a significant impact on strategies, funding, student charges, or current square footage. Do not include projects for which construction (not planning) funding has been appropriated. *Special Note: The requested information is for discussion purposes only and inclusion of this information in the plans does not signify approval of the projects.*

**RESPONSE:**

N/A

**Section J. Restructuring:** Provide information about any plans your institution has to seek an increased level of authority, relief from administrative or operational requirements, or renegotiation of existing management agreements.

**RESPONSE:**

N/A

**Section K. Evaluation of Previous Six-Year Plan:** Briefly summarize progress made in strategies identified in your institution’s previous six-year plan. Note how additional general fund support and reallocations were used to further the strategies.

**RESPONSE:**

**Required State Match Shortfall –** As a federally designated 1890 Land-Grant Institution, Virginia State University receives Federal funding to support its efforts in Research and Extension activities. A requirement to receiving these funds is a 100% match from the State. The General Funding available consist of specific amounts required for programs in addition to the required state match for formula funding. State matching requirements were sufficient for federal awards in fiscal years 2018-2019, but were short in FY 2020 (-$781,348) and FY 2021 (-$1,250,126). State appropriations verses federal award were: FY 2018 - $5,518,368.00 vs $5,356,214.00; FY 2019 - $5,590,340 vs $5,512,745; FY 2020 - $5,590,340.00 vs $6,371,688.00; and FY 2021 - $5,664,866 vs $6,914,992. State match was increased for State budget years 2021 ($1,461,956) and 2022 ($1,535,054). Based on recent increases in federal awards, the additional increases received for state match, in FY 2021 and FY 2022, will achieve a 100% match.

**Urban Agriculture Certificate Program** - Since 2017, VSU’s College of Agriculture has had four iterations of the Urban Agriculture Certificate Program. The course has been strengthened by COVID, allowing for a distance education approach with a virtual format. The course included: plant propagation and nursery management, plant disease and pest management, sustainable soil management, greenhouse production (hydroponic and aquaponic), animal husbandry (chickens and rabbits), and more. All courses were taught by Virginia State University and Virginia Tech professors. VSU will continue this strategy.

**Harding Street Indoor Urban Farm Research Center -** Virginia State University worked to bring fresh food to Petersburg residents through the Harding Street Community Center. The indoor urban farm opened in summer 2015, and was using indoor growing techniques to provide produce and fish to city residents, who were given the skills to start their own gardens. Harding Street has underwent renovations and expanded to offer healthy food preparation and nutrition education courses on-site; as well as, outdoor gardens that have provided a mechanism to produce food for community residents. The Harding Street facility was supposed to incorporate cross discipline research areas that were in the 2018 Six Year Plan for the Center for Agriculture Research Enjoyment and Outreach (CAREO); however, CAREO was disbanded. Therefore, Harding Street has changed to serve as an incubator space for indoor agriculture production and will continue.

**Specialty Crops Research** – The Agricultural Research Station (ARS) Plant Science Program and the Cooperative Agricultural Program has evaluated and promoted new crops that will provide greater returns for farmers. Faculty has continued to find new uses for plant products that increase the income of small farmers. The ARS has well-established research programs in the following areas: vegetable soybean/edamame, sorghum, tepary bean, pigeon pea, mung bean, and buckwheat. Cooperative Extension has well-established applied-research programs in berry production, ginger, and intensive vegetable production. All are explored as potential alternative cash crops for former tobacco farmers in Virginia. Both ARS and Cooperative Extension continued to research and educate Virginia residents about new ways to produce and earn money from viable, marketable specialty crop production. VSU will continue this strategy.

**Hops Research to support Virginia Agribusiness Development** – ARS scientists researched the growth of hops (Humulus lupulus L.) Researchers also worked with local producers to outline their needs in regards to the harvest and processing of hops on a small scale. VSU will continue this strategy.

**Industrial Hemp Research to support Virginia Agribusiness Development –** In 2015, the Commonwealth of Virginia authorized institutions of higher education to grow industrial hemp for research purposes, opening the door for the ARS to investigate the production of this versatile crop. In 2017 and 2018, VSU hosted field days on Industrial Hemp for potential growers and processers. The field day provided a forum for potential growers, researchers, marketing experts and industrial hemp product users to discuss the future of the crop in Virginia and neighboring states. Critical information was shared on the challenges of growing industrial hemp, the available and potential markets for industrial hemp products, and crop processing feasibility to help farmers decide whether to consider growing the crop. VSU will continue this strategy.

**Small Farm Outreach to Small and Limited Resource Farmers (SFOP)** - The Virginia State University’s Small Farm Outreach Program (SFOP) has continued to provide outreach, training, and technical assistance to more than 2,000 small, limited-resource, and socially disadvantaged farmers and ranchers to improve the profitability and sustainability of farming enterprises. SFOP demonstration projects have helped farmers and students learn about the production of high value produce through cost-efficient and environmentally friendly techniques to maximize profits. VSU will continue this strategy.

**STEM Education through AgDiscovery Programs** - The Agricultural Research Station and Cooperative Extension has hosted the AgDiscovery Summer Enrichment Program for eight consecutive years prior to COVID-19. During COVID-19, all students were not allowed on campus. However; 4-H STEAM programming went virtual. A collaboration with Virginia Tech produced a Mission to Mars Base Camp curriculum that has been picked up by National 4-H. This strategy is a continuation from the previous Six-Year Plan.

**Agriculture Research (ARS) Providing Experiential Learning Opportunities to Virginia State University Students** – ARS has provided valuable experiential learning opportunities in food science, animal science, biotechnology, agronomy, and soil science for VSU undergraduate and graduate students. Student workers have gained vital hands-on training, preparing them for graduate studies or to enter the job market. ARS faculty have served as undergraduate major advisors and as committee members for graduate student thesis. During COVID-19, students were not allowed to work. VSU will continue this strategy.

**Small Ruminant Research and Outreach Program -** Researchers at VSU have been investigating various plant byproducts as a potential economical source of feed for goats. In addition, ARS scientists have collaborated with a small ruminant extension faculty to increase producer knowledge and awareness on meat goat management (kid management, disease prevention, understanding and prevention of zoonotic diseases) by hosting workshops and field days. Extension has designed and built a mobile slaughter processing unit at VSU to educate and enhance profitability of Virginia’s small ruminant industry. The unit is complete and a certification course is being developed in partnership with Virginia Department of Agriculture and Consumer Services.VSU will continue this strategy.

**Section L. Diversity, Equity and Inclusion (DEI) Strategic Plan:** Provide an update on the completion status of your institution’s plan that is being coordinated with the Governor’s Director of Diversity, Equity and Inclusion. If a copy of the plan is available, please include it when your institution submits its initial plan. If a copy of the plan is not available for July 1 or if changes are made, please provide a copy with your institution’s final plan submission on October 1.

**RESPONSE:**

N/A

**Section M. Economic Development Annual Report:** Provide a copy of any report your institution has produced about its economic development contributions.

**RESPONSE:**

N/A