

Senate Armed Services Committee
Advance Policy Questions for Ms. Susanna Blume
Nominee to be Director, Cost Assessment and Program Evaluation

Duties

1. What is your understanding of the duties and functions of the Director of Cost Assessment and Program Evaluation (CAPE)?

CAPE provides decision support and independent analysis to the Secretary and Deputy Secretary of Defense. It does so through three primary lines of effort: programmatic decision support during the DoD's annual Program Budget Review process, independent cost assessment and oversight of Analyses of Alternatives to support the acquisition community, and leadership in the Department's analytic community.

2. What recommendations, if any, do you have for changes in the duties and functions of the Director of CAPE, as set forth in section 139a of title 10, United States Code, and in Department of Defense (DOD) regulations pertaining to functions of the Director of CAPE?

I believe the duties and functions entrusted to the Director of CAPE, and set forth by section 139a of Title 10 and DoD regulations, are critical to the effective management and resource prioritization within the Department. Although I do not have any recommendations for changes at this time, if confirmed, I look forward to working with Department leadership and the Congressional Defense Committees to ensure the Director of CAPE continues to have the authorities and resources necessary to effectively execute the organization's mission.

Qualifications

3. What background and experience do you have that you believe qualify you for this position?

As Deputy Chief of Staff for Programs and Plans to then-Deputy Secretary of Defense Bob Work, working closely with the Director of CAPE and the Under Secretary of Defense, Comptroller, I supported the Secretary and Deputy Secretary on every critical programmatic decision made during that three year period. After leaving government, I went to the Center for a New American Security where my research focused on the core functions of CAPE, developing recommendations for using the Department's programming process to align the size and shape of the Joint Force with the defense strategy.

4. Specifically, what background and experience do you have in the acquisition of major weapons systems?

As Deputy Chief of Staff for Programs and Plans to then-Deputy Secretary of Defense Bob Work, I worked very closely with the Under Secretary for Acquisition, Technology, and Logistics to support the Secretary and Deputy Secretary on the most difficult acquisition

challenges facing the Department. During my time as Director of the Defense Program at the Center for a New American Security, I did significant research on the history of defense acquisition reform efforts and developed ideas and recommendations for future reform efforts.

5. What leadership and management experience do you possess that you would apply to your service as Director, CAPE, if confirmed?

For the first three months of the Biden Administration, I performed the duties of the Director, CAPE, leading the organization through a challenging transition. Prior to that, I was Director of the Defense Program at the Center for a New American Security, where I successfully led my team through a period of substantial growth despite the COVID-19 pandemic.

Major Challenges and Priorities

6. If confirmed, what broad priorities would you establish?

If confirmed as Director of CAPE, my top priority would be supporting the Secretary and the Deputy Secretary in making the most difficult programmatic decisions they face using rigorous independent analysis. I would also continue to build CAPE's cost analysis capability, focusing on sustainment costs and emerging technologies. Last but not least, I would work to build the Department's joint analytic capability, ensuring that future DoD leaders have the best information possible when making difficult choices.

7. In your view, what are the major challenges you would confront if confirmed as Director of CAPE?

In my view, the biggest challenge facing any Director of CAPE is effectively prioritizing the organization's relatively small, but extremely talented workforce against the full range of difficult analytic problems facing the Department. Doing so requires a relentless focus on the highest priority challenges facing the Secretary and Deputy Secretary of Defense.

8. If confirmed, what management actions and timelines would you establish to address each of these challenges?

Effective prioritization of CAPE's bandwidth will require relentless focus on the highest priority challenges facing the Secretary and Deputy Secretary of Defense. If confirmed, I look forward to working with the Secretary and Deputy Secretary and the Congress to make sure CAPE has the resources, workforce, and expertise it needs to fulfill its mission.

9. Do you believe the CAPE office would benefit from periodic outside expert reviews of CAPE's capabilities, processes, and decisions? Please explain your answer.

Any organization could benefit from outside expert review, but the purpose and objectives of such a review should be very clearly defined from the outset, otherwise the result can be the generation of solutions in search of problems. In my experience, outside expert review is most

useful during times of significant institutional turmoil or change. If confirmed, I would be open to soliciting an outside expert review of CAPE tailored to specific objectives, should circumstances warrant it. More broadly, I welcome the views of outside experts on a wide range of specific issues facing CAPE, and if confirmed, intend to solicit those views as a routine practice in the course of CAPE's work.

10. If confirmed, how would you plan to rebuild in OSD the analytical capability and expertise that has been lost—as documented in the assessment and recommendations of the National Defense Strategy Commission?

If confirmed, rebuilding the Department's joint analytic capability would be a high priority for me. DoD has significant analytic talent, capacity, and capability. However, there are gaps, especially at the joint and defense-wide level. My priority, if confirmed, would be to work with core stakeholders in the analytic community to resolve known gaps in joint analysis and better integrate quantitative analysis with war-gaming, experimentation, and exercises. I also believe that more work is needed on data collection, knowledge management, and modeling. If confirmed, I would work with the Department's leadership to advance analytic capability that directly supports senior leader decision making.

11. If confirmed, how do you plan to balance the Director of CAPE's competing roles of representing independent and realistic analyses and supporting the President's Budget priorities at the same time?

One of CAPE's primary responsibilities is ensuring that decisions on the President's Budget priorities are underpinned by independent and rigorous analyses. If executed correctly, the two should not be in conflict. If confirmed, I would work to ensure that this is the case.

12. To what extent should CAPE be involved in policy or political judgments, in your view?

CAPE's mission is to provide independent, unbiased, rigorous analysis to the Secretary and Deputy Secretary of Defense. CAPE does not make policy decisions, but its independent analysis can be used by policy makers to inform their decisions.

13. Do you believe the functions assigned to CAPE on the dissolution of the DOD Chief Management Officer position are appropriate for performance by CAPE?

As I understand it, Deputy Secretary Hicks is still reviewing the previous administration's recommendations for the dissolution of the CMO organization. If confirmed, I look forward to supporting the Deputy Secretary in those deliberations. In my view, there are functions previously performed by CMO that could be appropriately reassigned to CAPE.

14. In your view, does CAPE have an adequate number of appropriately skilled personnel to perform these functions?

I believe that the Deputy Secretary's review will allow for the transfer of personnel and resources to support any new functions assigned to CAPE.

15. In your view, does the Director of CAPE have a role to play in promoting civilian control over the military?

Yes.

16. If so, how do you view that role?

The Director of CAPE is responsible for providing independent analysis to the Secretary and Deputy Secretary of Defense, giving the senior-most civilian leadership of the Department unbiased information on which to base their decisions. In doing so, CAPE supports the Secretary of Defense in meaningfully reviewing and making decisions on Service resource requests, ensuring that the Future Years Defense Program is aligned with his and the President's priorities and the defense strategy.

Relations with Congress

For years, CAPE made available its independent analyses, recommendations, and analysts to Congressional members and staff to help Congress understand the choices and tradeoffs being made by the DOD.

17. What are your views on the state of the relationship between the Director of CAPE and the Senate Armed Services Committee in particular, and with the Congress in general?

If confirmed, my intent is for CAPE to have a transparent, direct, and responsive relationship with Congress. I will ensure that the CAPE staff understands that timely and accurate communication with the oversight committees is critical to me and my vision for CAPE.

18. Should the Director of CAPE be authorized to have more direct and independent communications with the Congress, similar to the Director of Operational Test and Evaluation?

I believe that CAPE presently has sufficient authority to communicate with Congress, but if this Committee or others are not receiving what they need from CAPE, I would welcome a conversation about how to ensure that CAPE can provide any necessary information, if confirmed.

19. How do you plan to balance your concurrent but competing roles of representing independent and realistic analyses and supporting the President's Budget priorities?

One of CAPE's primary responsibilities is ensuring that decisions on the President's Budget priorities are underpinned by independent and rigorous analyses. If executed correctly, the two should not be in conflict. If confirmed, I would work to ensure that this is the case.

20. If confirmed, what actions would you take to sustain a productive and mutually beneficial relationship with the Congress?

If confirmed, I am committed to an open and transparent relationship with Congress and would deliver timely responses to requests for information. I would also be open to receiving feedback on how CAPE can better support Congress's oversight of the Department.

The Planning, Programming, Budgeting, and Execution (PPBE) Process

In 1961, then-Secretary of Defense Robert McNamara created the framework of the current PPBE process. As the core decision making process by which the Department of Defense (DOD) decides how and on what it spends its money, the PPBE process operates to connect strategic objectives with resources. While the process has undergone some changes in the intervening decades, it remains essentially intact.

21. Do you believe the PPBE process needs to be reformed? If so, how?

Every process has room for improvement. The current PPBE process has many merits; it is inclusive of stakeholders across the defense enterprise; it is comprehensive in its scope; and it creates multiple opportunities to inject rigorous analysis into the decision-making process. However, I do believe that there are changes that the Department and Congress can make to build more flexibility and agility into an already robust process. If confirmed, I look forward to working with the Secretary, the Deputy Secretary, and the defense oversight committees to define and implement appropriate and necessary updates.

22. What changes would you recommend, if any, to the PPBE process with a view to improving resourcing decisions within DOD to help the Department take advantage of emerging technologies or address emerging threats?

I believe the PPBE process needs to become more agile to accommodate the dynamic technological and threat environments facing the Department. There are multiple ways to build additional agility into the process, some within the control of the Department, while others will require close cooperation with Congress to implement. If confirmed, I look forward to working with other DoD leaders, and the defense oversight committees to define and implement solutions in this space.

23. In your view, is the PPBE process flexible enough to enable DOD to make programmatic changes within the annual budget cycle?

I believe this is an area where the current PPBE process could be improved. If confirmed, I look forward to working with the Deputy Secretary, the Comptroller, and Congress to build additional flexibility into the process.

24. The current PPBE process is largely driven by bottom-up programming from the Military Departments. You have previously written in support of proposals to

give the Secretary of Defense and the Deputy Secretary of Defense additional control over allocation of resources by reserving a certain amount of resources for their allocation at the end of the process. What do you view as the pros and cons of such proposals?

A resource reserve provides the Secretary and Deputy Secretary with flexibility to respond to strategic shifts and emerging priorities by allocating resources later in the PPBE process; this comes at the cost of limiting programmatic options for the Military Departments earlier in the process. Because of this tension, it is important to strike the right balance between limiting options and providing flexibility. If confirmed, I am committed to working with the Deputy Secretary and other Department leaders to strike this balance and ensure the PPBE process is responsive and effective.

Cost Assessment Practices

25. In your opinion, what factors cause differences in the cost estimates calculated by CAPE and the non-advocate cost assessment reflected in the service cost positions?

Cost estimates prepared by different organizations should rarely produce identical results. Cost estimates necessarily require subject matter expertise which can lead to different assumptions, different evaluations of program risk, and different cost estimating relationships, which taken together affect the results of cost estimates. However, I would note that since the passage of WSARA in 2009, there have been fewer than ten life cycle cost estimates where the difference between the CAPE independent cost estimate and the service cost position has exceeded 10%. In fact, the median difference between CAPE and service cost estimates has been 2.0% over that time period. The Department has increased collection of actual cost data from contractors, which has improved the realism and accuracy of all DoD cost estimates. If confirmed, I intend to continue to emphasize this in order to produce realistic cost estimates.

26. Some assert that the accuracy of cost estimates could be improved by estimating the range of costs, rather than a set cost estimate? What is your view of such proposals?

I believe that representing a range of costs is appropriate in some cases, especially for programs in their early phases. For example, prior to Milestone A, a program's cost data may be of poor quality, the program may be poorly defined, or there may be ambiguity on assumptions which could affect the cost estimate. For cases like these, I would support including a range of costs in estimates.

27. If confirmed, what actions would you take to increase the fidelity and accuracy of independent cost estimates for major defense acquisition programs?

There is opportunity to improve the fidelity and accuracy of independent cost estimate for major defense acquisition programs, especially in the area of operations and sustainment cost estimating. If confirmed, I would support CAPE's current efforts to improve its cost data

collection systems, historical cost reporting systems, and continue development of the new Enterprise Visibility and Management and Oversight of Operating and Support Cost (EVAMOS) database to be able to better track and assess O&S costs and improve cost estimation over a system's life cycle.

28. In your view, what more strategic data planning and collection is required across the Department to provide better independent cost estimates?

It is my understanding that CAPE is continuing to make strides improving the collection, accessibility, and timeliness of cost data. Particularly with recent implementation of the FlexFile concept that provides government analysts access to data provided directly from contractor internal business systems in modern, machine-readable files. Additionally, CAPE continues to improve the Cost Assessment Data Enterprise (CADE) system, and updates internal DoD Instructions and Manuals as needed to ensure standardized reporting processes and consistent cost data collection across the newly available Adaptive Acquisition Framework (AAF) pathways. Despite these proactive steps to pre-emptively adapt many processes, I anticipate further requirements for change as the Services fully implement the AAF. If confirmed, I look forward to working with the Services and Defense-wide agencies to ensure we adapt data planning and data collection as necessary.

29. If confirmed, how would you resource and champion the CAPE and cost community workforce and the Cost Assessment Data Enterprise to ensure sufficient capacity and capability, continued partnership, unity of effort, and sharing of data across the cost and acquisition communities?

Section 139a of Title 10 gives the Director of CAPE the responsibility to lead the development of improved analytical skills, competencies, tools, and data in support of cost assessment. CAPE has a long history of successfully collaborating across the Department in the advancement of these goals. If confirmed, I would continue this work to advance the state of the art in each of these areas.

30. What major shortfalls do you perceive in the Department's ability to estimate program development, procurement, and life-cycle costs?

I see opportunities where improvements in the collection of O&S cost data, expansion of the cost data collection for middle tier Acquisition programs, software costing, and additional education and training of the cost assessment workforce could improve the Department's ability to estimate program costs. If confirmed, I look forward to pursuing improvements in each of these areas.

31. What steps would you take to address these shortfalls, if confirmed?

If confirmed, I would support the continued development and expansion of the Enterprise Visibility and Management and Oversight of Operating and Support Cost (EVAMOS) to capture O&S costs. I would also focus on updating education and training related to new acquisition pathways and new data and analytic capabilities. I would explore approaches to estimating software costs that are better suited to the structure of those programs. Finally, I

would consider whether the Department should levy more traditional cost estimating approaches for middle-tier acquisition programs.

32. If confirmed, what specific steps would you take to implement the direction from Congress in the Joint Explanatory Statement accompanying the Fiscal Year (FY) 2021 National Defense Authorization Act (NDAA) to the Director, CAPE, the Defense Digital Service, and the directors of developmental test and operational test and evaluation, to incorporate lessons learned from the implementation of sections 873 and 874 of the FY 2018 NDAA, and sections 215 and 869 of the FY 2019 NDAA in the development of guidance and oversight procedures for managing, estimating, and assessing software programs?

If confirmed, I would work to ensure CAPE continues to identify new sources of data to determine meaningful, informative cost estimating relationships for assessing software programs. I would also ensure that meaningful cost estimates are produced as early as possible to inform milestone decision authority decision making, working with the acquisition community to develop a process to permit meaningful and timely input. I would also examine whether CAPE's current approach to developing software cost estimates is suited to the structure of those programs.

33. If confirmed, to what extent would you ensure CAPE uses improved metrics and cost estimation assumptions in a recognition that software must be continually maintained and developed to meet warfighter and DOD institutional needs?

If confirmed, I commit to looking at whether CAPE's current approach to estimating software costs is suited to the structure of those programs. I would also ensure that CAPE continues to work with USD(A&S) and the Service Cost Agencies to identify, develop, and implement improved metrics and cost estimation assumptions for evaluating software programs.

Program Evaluation

The Director of CAPE is responsible for the review, analysis, and evaluation of programs for executing approved strategies and policies, and for assessments of alternative plans, programs, and policies with respect to the acquisition programs of the Department of Defense.

34. What is your view of the significance of independent review, analysis, and evaluation of programs, and assessments of alternative programs, to the effective management of the Department of Defense?

Effective management of the Department entails ensuring programs align with strategy and are cost-effective. Independent reviews play key roles in this process. CAPE's analyses of program alternatives provide Department leadership with independent comparative assessments of performance, cost, and schedule risks to help inform acquisition decisions. CAPE's independent cost estimates further refine Department understanding of cost and schedule risks to help inform program resourcing decisions.

35. Do you see the need for any changes or improvements to the organization, process, or methodology used by the Department for such review, analysis, and assessments?

Every process and organization has room for improvement. If confirmed, I am committed to continual evaluation of CAPE and its processes, making adjustments where warranted.

36. In your view, does the Director of CAPE have the staffing, authority, access to information, and resources needed to carry out this function?

I believe CAPE currently has the necessary authorities to execute its functions. I also believe that CAPE generally has access to the data it needs, however, there is certainly room for improvement in the way the Department collects and manages data. Improvement in this space consistent with the Deputy Secretary's Five Data Decrees would make it easier and more efficient for CAPE to meet its analytic objectives. If confirmed, I am committed to assessing these needs, and advocating for any additional resources necessary to ensure CAPE continues to effectively accomplish its missions.

37. In your view, how should the Director of CAPE interact with service acquisition executives, program executive officers, program managers, and other program officials in preparing independent evaluations of major defense acquisition programs?

If confirmed, I am committed to closely collaborating with Service Acquisition Executives and their staffs in a fully transparent manner. Collaboration and transparency are important to building lasting partnerships that ensure independent assessments are based on common datasets and include the equities and perspectives of all stakeholders.

38. What role should the Director of CAPE play in assessing and evaluating management, business, and organizational functions, initiatives, and activities within the Defense Department?

CAPE has long played a key role in providing independent analyses and assessments of Departmental reform initiatives. If confirmed, I am committed to working with the Deputy Secretary of Defense and other Department leaders to ensure CAPE continues to provide independent evaluations of Departmental reform efforts.

39. If confirmed, what safeguards will you put in place to ensure CAPE does not advocate policy or pre-judge a policy decision more properly in the purview of other DOD officials?

CAPE fulfills a critical independent evaluator role in the Department. CAPE makes no decisions; rather it provides independent analysis and alternatives to the Department's decision makers for their consideration. In this role, CAPE informs Department acquisition and resourcing deliberations by examining multiple alternatives and ensuring the costs, benefits, risks, and

perspectives of all stakeholders are fully articulated for each option. If confirmed, I am committed to ensuring CAPE continues to function as a non-advocate provider of independent analysis while collaborating closely with all stakeholders.

Technology Maturity

The Navy spent approximately \$1 billion on 10 Remote Multi-Mission Vehicles (RMMVs), semi-submersible Unmanned Surface Vehicles (USVs), prior to cancelling the program in 2016, primarily due to unacceptable reliability.

40. What is your understanding of the RMMV program?

My understanding is that RMMV was a component of the Mine Countermeasure (MCM) module for the Littoral Combat Ship. It is my understanding that Navy cancelled this program after encountering multiple significant issues with both reliability and performance.

41. What lessons learned should DOD take from the RMMV program, in your view?

Although I have limited familiarity with the reasons for this program's cancellation, I believe DoD should ensure proposed investments are grounded in analysis complete with assessments of operational utility, cost-benefit, and technological risk. Additionally, robust analysis should not end at program initiation. DoD should continually assess programs to ensure performance, cost, and schedule goals are met for continued return on investment.

42. Based on the RMMV experience, do you believe that critical, but unproven subsystems for large unmanned vessels should be prototyped and proven prior to procurement of an entire large unmanned system? Please explain your answer.

Prototyping and land-based testing can be critical components of a successful acquisition program. With regards to large unmanned vessels, I am committed to a rigorous Analysis of Alternatives to ensure the operational and technological risks associated with those systems are well understood prior to full-rate production.

The committee understands that, based primarily on an CAPE-led analysis, the Navy's FY 2020 budget request included procurement of 10 Large Unmanned Surface Vessels (LUSVs) in the Future Years Defense Program (FYDP) at a cost of approximately \$3.1 billion. Although LUSVs may have performed well in analysis, they do not currently exist as envisioned. LUSVs evolved from conceptual analysis to a large budget plus-up for production without a rigorous technology risk assessment or engineering development plan to guide development. The Committee understands that Strategic Capabilities Office (SCO) USVs, intended to provide risk reduction for the Navy LUSV program, have demonstrated less than one week of continuous operation, as compared to the minimum Navy requirement of 30 days, and are approximately 25 percent of the size by tonnage of a Navy LUSV. These key shortfalls mean SCO USV lessons learned will have limited applicability to the Navy LUSV program.

43. How should CAPE analysis and recommendations inform budget requests regarding new capabilities that do not exist?

I believe that CAPE plays a critical role in helping the Department strike the right balance between the imperative to deliver advanced capabilities to the warfighter in a timely manner and the desire to reduce technological risk in new programs. I cannot speak to the decisions behind the FY 2020 budget request, but if confirmed I intend to ensure that CAPE analyses seek this balance.

44. How important is it, in your view, for the Department to mature its technologies with research and development funds before these technologies are incorporated into product development programs?

I believe maturation of new technologies is critical to the success of programs. Targeted and robust R&D funding, combined with rigorous prototyping and experimentation, can reduce risk before technologies are incorporated into programs.

45. What role do you see for the Director of CAPE in ensuring that key components and technologies to be incorporated into major acquisition programs meet the Department's technological maturity goals?

Technology maturity of components is a key factor in major acquisition programs. If confirmed, I will work with the Under Secretary for Acquisition and Sustainment, the Under Secretary for Research and Engineering, the Director of Operational Test and Evaluation, the Services and others to ensure that technology components have a robust prototyping, testing, and experimentation plan. If programs are unable to reach an adequate level of maturity, changes can be made as part of the acquisition or annual Program Budget Review processes.

46. If confirmed, how would you approach the task of ensuring that any CAPE recommendation is technologically mature and technically sound, or reflects a plan to achieve this level of knowledge, prior to including the program to which it applies in a budget request?

If confirmed, I will ensure that CAPE works with Under Secretary for Acquisition and Sustainment, the Under Secretary for Research and Engineering, the Director of Operational Test and Evaluation, the Services and others to ensure that promising technologies have robust prototyping, testing, and experimentation plans. If programs are unable to reach an adequate level of maturity, changes can be made as part of the acquisition or annual Program Review processes.

47. When CAPE identifies a new, promising concept that may entail new platforms or capabilities, how should the Department ensure there is a rigorous engineering-based process to transition the concept into a DOD acquisition program?

New, promising concepts, regardless of their origin, can be assessed through Analyses of

Alternatives (AoA), requirements documents, and work conducted by relevant program offices. CAPE works closely with other OSD components and the Services throughout the AoA process to ensure promising technologies have a robust prototyping, testing, and experimentation plan as concepts are transitioned into a DOD acquisition program. CAPE writes AoA guidance, co-chairs priority reviews, and determines analytic sufficiency.

48. What do you envision as the most effective relationship between the Director of CAPE and the Undersecretary of Defense for Research and Engineering (USD(R&E)) in regard to obtaining technology readiness assessments and other engineering-based knowledge to inform CAPE recommendations on concept development, new acquisitions (e.g., LUSVs), or changes to existing acquisitions?

I envision a transparent and collaborative relationship between CAPE and R&E to assess technology readiness and other engineering-based knowledge for concept development, new acquisitions, or changes to existing acquisitions. This would include assessments throughout the Program Review and acquisition processes in addition to more informal and frequent exchanges.

49. If confirmed, what changes to the Director of CAPE-USD(R&E) relationship or other Director of CAPE relationships would you consider to improve the technical foundation of concept development, new acquisitions, or changes to existing acquisitions recommended by CAPE?

In conducting its independent analyses, CAPE must work very closely with organizations across the DoD enterprise, including USD(R&E). If confirmed, I intend to work openly and transparently with other OSD components, the Services, the Joint Staff, and Combatant Commands to ensure that CAPE's analysis is fully informed by the expertise resident in all of these organizations.

Section 8669b of title 10, U.S. Code, established a Senior Technical Authority for each class of naval vessels.

50. What is your understanding of the requirements of section 8669b?

The establishment of an independent Senior Technical Authority represents an important step to establish, monitor, and approve technical standards for each class of naval vessel to ensure their timely production, and to monitor systems engineering, technology, and ship integration risks.

51. If confirmed, how would you work with Senior Technical Authorities to ensure they are able both to comply fully with their statutory duties for naval vessels and to inform CAPE analysis of the technical aspects of naval vessels?

If confirmed, I will work with the Navy to ensure that the CAPE staff is well-connected with the Senior Technical Authorities and has all the necessary information to provide Department leadership independent assessments of naval programs.

Acquisition Process

52. What is your understanding of the role of the Director of CAPE in the acquisition process?

CAPE's role is to provide acquisition support on cost analysis and analysis of alternatives (AoA). CAPE prepares independent cost estimates of major weapons systems as well as leadership and support of the broader DoD cost community, ensuring that acquisition decisions are informed by realistic cost estimates. CAPE also provides guidance for and assessments of AoAs, ensuring that decision makers consider trade-offs among effectiveness, suitability, and life-cycle costs (or total ownership costs, if applicable) of alternatives that satisfy established capability needs among a comprehensive set of potential materiel solutions. CAPE's expertise in cost analysis ensures that acquisition decisions are based on a realistic understanding of the resources available, and that the Department remains a good steward of taxpayers' dollars while providing critical capabilities to warfighters.

53. What is your view of the significance of sound, unbiased cost estimating throughout the acquisition process?

Credible schedule forecasts and cost estimates are essential to managing successful acquisition programs. Realistic cost and schedule estimates are foundational to having a predictable program that delivers as promised and has the necessary resources to fully implement the acquisition program.

54. What is your understanding of the role of the Director of CAPE in the requirements development and resource-allocation processes?

In my view, the Director of CAPE plays key roles in both processes. CAPE participates as an advisor in the Joint Requirements Oversight Council process run by the Joint Staff to develop requirements. The Under Secretary of Defense (Comptroller)/Chief Financial Officer and the Director of CAPE share the leadership of resource allocation processes that lead to the annual President's Budget submission and the Future Years Defense Program.

55. Do you see the need for any additional processes or mechanisms to ensure coordination between the budget, acquisition, and requirements systems of the Department of Defense and to ensure that appropriate trade-offs are made between cost, schedule, and performance requirements early in the acquisition process?

I believe the current processes and authorities are sufficient, if paired with very close coordination among OSD components, the Joint Staff, and the Services. If confirmed, I intend to pursue an intensely collaborative approach to ensure that decision makers are supported by rigorous analysis when considering these trade-offs.

56. If confirmed, how would you ensure that CAPE provides analytical options for decision makers so that they can make informed, data driven choices on acquisition programs?

Supporting DoD's decision makers with data-driven analyses and options is the core business of CAPE. If confirmed, I would continue CAPE's long tradition of rigorous independent analysis while also continuously seeking to improve upon it by looking for ways to improve access to and quality of data, seeking out new analytic approaches, methodologies, and models, and applying CAPE's analytic talent to the Secretary's highest priorities.

57. What role do you see for the Director of CAPE in controlling cost growth on the Department's major defense acquisition programs?

CAPE's role is both prepare independent cost estimates and to provide leadership across DoD's cost community, ensuring that acquisition decisions are informed by realistic estimates of a program's total cost. To this end, CAPE expanding and improving its ability to estimate sustainment cost, building a new sustainment cost database (EVAMOSC) which will be available to the cost community across DoD.

58. What role do you see for the Director of CAPE in performing CAPE functions for middle tier acquisition programs and other adaptive acquisition pathway efforts?

It is my understanding that CAPE participates in the Middle Tier Acquisition governance board to assist in steering and providing oversight of Middle Tier Authorities for acquisition programs. CAPE also prepares and approves cost data collection plans for Middle Tier Prototyping and Fielding programs. In addition, CAPE has updated internal DoD Instructions and Manuals to align its processes with each of the acquisition pathways for consistency with proper timelines and requirements. If confirmed, I would work closely with Departmental leadership to ensure that middle tier acquisition programs and the use of other adaptive acquisition pathways meet the need to innovate rapidly, but in a way that continues to make the best use of taxpayer dollars.

Financial Management and Auditability

59. What is your understanding and assessment of the Department of Defense's efforts to achieve a clean financial statement audit?

The Department's audit effort is led by the Under Secretary of Defense (Comptroller) Chief Financial Officer. My understanding is that DoD has made considerable progress in auditability over the past several years, but still has much work to do before all components can achieve a clean audit opinion.

60. Especially for the purposes of cost control and program evaluation, how would the Department of Defense benefit during the process of undertaking full financial statement audits, and what further benefits would accrue once the Department is able to achieve and maintain a clean financial statement audit?

The ability to produce quality analysis is wholly dependent on availability and accessibility of quality data. Any initiative in the Department to improve data collection and consolidation will benefit CAPE and the DoD analytic community, and the process of working towards a clean

financial statement audit should improve both the quality and accessibility of financial data across DoD.

61. If the Department of Defense improves its internal controls and achieves a clean audit, do you expect the Department would also improve its ability to control acquisition costs and estimate costs of development, procurement, and sustainment of systems and services? Why or why not?

I expect the high fidelity data associated with a clean audit would improve the Department's ability to estimate and manage costs across the acquisition lifecycle. Better data on actual incurred costs will enable better management on programs in real time and should improve the data sets available for estimating costs on new programs in the future.

62. In your view, what impediments hinder the Department's ability to achieve a clean audit and if confirmed, how would you lead CAPE in helping to address these impediments?

A clean audit opinion for the DoD is difficult due to the sheer size and complexity of the organization. There are many factors that complicate a DoD audit, not all of which can be resolved by simply increasing resources dedicated to the process. However, if confirmed I would work closely with the DoD Comptroller to evaluate any resource requests necessary to enable audits are thoroughly considered during the annual Program Budget Review process.

63. In your view, how can CAPE's efforts to improve data collection and analysis contribute to broader efforts to improve financial management in the Department of Defense?

CAPE's data collection and distribution efforts, such as Cost Assessment Data Enterprise (CADE), improve the accessibility and usability of high quality data for financial, programmatic, and operational analysis across the Department.

Data

64. What is your assessment of the Defense Department's ability to efficiently collect data on its systems and processes to inform analysis and decision making?

My view is that the Department has made considerable progress in this area over the past several years, though much work remains to be done. I believe the Department has a robust approach underway to address financial and cost data. Those efforts need to be sustained and expanded to address other critical factors the Department's leaders need when making important decisions. Operational, personnel, readiness, and force development all deserve additional attention to ensure efficient data collection. If confirmed, I am committed to working with the Chief Data Officer to improve data collection, accessibility, and use in decision making in accordance with the Deputy Secretary's Five Data Decrees.

65. If confirmed, what initiatives will you undertake to improve the Department's

use of data in its processes?

CAPE collects and uses data to support its core mission of producing independent cost, program, and strategic analyses. If confirmed, I am committed to reinforcing CAPE's focus on data driven analysis. I would also want to partner with the Chief Data Officer and other stakeholders to set priorities for data reform efforts, revise data policies, and identify necessary resources to ensure data is managed as a strategic resource.

66. What are the barriers that prevent the Department from collecting the data it needs to analyze and improve its processes and programs?

There are technical, policy, and cultural barriers that prevent DoD from fully maximizing the utility of its data. In my experience, a few examples include limitations of legacy IT systems, complications due to classification and need-to-know requirements, and cultural resistance to change.

67. If confirmed, what steps would you take to help the Department overcome these barriers?

If confirmed, I would work closely with the Chief Data Officer and other stakeholders to prioritize data reform efforts, revise and enforce data policies, and identify investments needed to ensure data is available to people, processes, and platforms.

68. In your view, what areas of DOD operations and management would benefit from improvements in the use of data, with a view to improving the Department's mission execution or management processes?

I believe the regular use of data to underpin operational and management decisions at the Department level is critical. There have been significant efforts to improve the use of data for such decisions, which is encouraging. Budget transparency, personnel management, strategy implementation, force management, and acquisition program management are all areas that I believe could benefit from continued progress in this area.

Improved data and software infrastructure for better decision making and analyses and warfighting is a major priority for Congress. The Director of CAPE is the leader of the Department's cost and program analysis community.

69. If confirmed, how would you prioritize improved strategic data collection and improved software infrastructure in both the cost and program analysis communities, and in the conduct of strategic reviews of the Services' investments?

If confirmed, I would look to build on the success of CAPE's CADE database, which has improved the accuracy of cost estimates not just within CAPE, but across the DoD cost community. I would continue to support development of CAPE's new sustainment cost database, EVAMOS. More broadly, I would work with DoD's Chief Data Officer to improve data collection, accessibility, and use across the Department in accordance with the Deputy

Secretary's Five Data Decrees.

Workforce

70. If confirmed, how would you view your role as the Director of CAPE in leading and spearheading improvements in and development of the cost and program analytical community across the Department?

If confirmed as the Director of CAPE, I would continue to build the analytical skills and cost competencies of the Department's analytical workforce to advance data driven decision support, with particular focus on the education and training of the analytical and cost assessment workforces.

71. Does CAPE currently have the resident capacity and capability in its workforce to adequately meet all assigned mission tasks, while providing personnel with adequate professional development opportunities?

CAPE's workforce is incredibly talented, but the organization's ability to provide in-depth decision support to the Department's senior-most leadership is limited by the organizations current manning. If confirmed, I would support a sustainable and executable growth path for CAPE.

72. In your view, does DOD as a whole have sufficient capability and capacity in its cost and program analytical workforce?

DoD has significant analytic talent, capacity, and capability, much of it resident in the Services, but there are gaps, especially at the joint and defense-wide level.

73. Where might the Department improve in this area, in your view?

In my view, the Department could better integrate quantitative analysis with war-gaming, experimentation, and exercises. I also believe that more work is needed on data collection, knowledge management, and modeling. If confirmed, I would work with the Department's leadership to advance analytic capability that directly supports strategic decision making.

74. The Joint Staff has repeatedly indicated that it does not possess the analytical capacity or capability to carry out certain tasks assigned to it. In your view, is it an appropriate use of CAPE resources to devote workforce time to meet those Joint Staff shortfalls?

It is my understanding that CAPE's workforce is already stressed to execute the tasks assigned to it, and does not at present have excess capacity. I also do not believe CAPE is, or should be, the only organization capable of providing analytically rigorous decision support to DoD's most senior leaders. If confirmed, I would direct CAPE's finite analytic resources towards the Secretary and Deputy Secretary's highest priorities.

75. If confirmed, what would be your priorities for improvement in the quality and expertise of the cost and program analytical community?

CAPE is a leader of the analytical and cost community, working with all of DoD's analytic organizations to identify analytic priorities, coordinate work plans, improve tools, improve data availability, and manage knowledge. Together, the analytic community has identified opportunities to improve the analytic institution in areas such as security, knowledge management, and availability of data and tools in new domains such as cyber. If confirmed, my priority will be improving education and training, data collection and accessibility, and ensuring the community has access to more powerful analytic tools.

76. What is your assessment of the diversity of the CAPE workforce? If confirmed, what specific efforts would you undertake to diversify CAPE's workforce and what benefit would you hope to derive from each such effort?

CAPE has improved the diversity of its workforce in recent years, but work remains to be done in this area. Creating a diverse workforce takes constant attention and if confirmed, I would be committed to supporting diversity in the CAPE organization. I would prioritize two areas: first, recruitment to ensure diversity across the organization and second, providing a supportive and inclusive environment where all employees have the opportunity to gain experience, grow, and be rewarded based on merit. It is my belief that the organization will benefit from the creativity and alternative views that come from a workforce comprised of people with diverse backgrounds and perspectives.

Space Acquisition

According to a study by the Government Accountability Office (GAO), fragmented leadership has undermined the Department of Defense's ability to deliver space capabilities to the warfighter on time and on budget. Fractured decision-making and many layers of bureaucracy have been long-time sources of concern in this regard.

77. Do you believe the Department's existing space acquisition structure is sufficient?

The Department's space acquisition structure incorporates many of the same checks and balances as acquisitions in other capability areas. The recent Adaptive Acquisition Framework reforms provide options to streamline some of these layers of bureaucracy where appropriate. The use of this Framework is still evolving and, if confirmed, I would work with other Department leaders to evaluate improvements to DOD's space acquisition structure.

78. What is your opinion on the congressionally directed changes in this structure since the stand-up of the U.S. Space Force?

The consolidation and elevation of space acquisition responsibilities in the Space Force places a needed spotlight on these critical and complex capabilities. If confirmed, I look forward to working with acquisition and programming officials of the Space Force.

79. What additional changes are necessary and appropriate, in your view?

With the Adaptive Acquisition Framework, the Department has a wider range of options for executing space acquisition programs. Within this range of options, the Department should seek the right balance between speed and oversight. If confirmed, I would work with the Office of the Undersecretary of Defense for Acquisition and Sustainment and the U.S. Space Force to identify what acquisition practices are unnecessary barriers and may be slowing the process, and which provide a valuable assessment of technical, cost, and/or schedule risks.

80. When would you expect the Space Alternative Acquisition Report to be transmitted to Congress?

It is my understanding that the Space Force is the lead for this report. If confirmed, I will ensure that CAPE does what it needs to do to support timely delivery to Congress.

81. In your view, how might CAPE studies and assessments support more competition in the launch of Department of Defense payloads?

It is my understanding that the Space Force's National Security Space Launch program office maintains a portfolio of launch options to ensure the Department can cost effectively procure launches for its mission-critical payloads while also encouraging the development of a range of smaller, new providers. As the launch market matures, CAPE studies may have a role in assessing the technical maturity of new entrants, estimating the range of payloads that may be good candidates for expanded launch competition, or validating expected cost savings from new contracts.

Department of Defense Information Technology (IT) Programs

82. If confirmed, what steps would you take to promote changes in Department of Defense efforts to improve the development and deployment of major IT systems and IT service acquisition programs?

If confirmed, I would work with DoD Chief Information Officer, Under Secretary of Defense for Acquisition and Sustainment, and the Services, to assess best practices and incorporate them into the DoD acquisition process for IT systems and services.

83. If confirmed, how would you endeavor to shape DOD efforts to undertake business process reengineering before initiating new business systems, and IT program development and deployment?

Business process reengineering is a critical foundation of any new business and IT system. It is my understanding that the Office of the Under Secretary of Defense for Acquisition and Sustainment has established business process reengineering as a required component of the Business Capability Acquisition Cycle process. The execution of these efforts rely on a firm understanding of business requirements, creative thinking, and a willingness to embrace change.

If confirmed, I would work with the Under Secretary of Defense for Acquisition and Sustainment and other Department leaders to ensure business process reengineering is an integral part of assessing any new business system.

84. Will you commit that, if confirmed, you will assess the development and deployment of defense business IT systems and report back to this Committee on the findings and recommendations resulting from your assessment?

If confirmed, I commit to working with other Department leaders to assess the development and deployment of defense business IT systems and report findings and recommendations to Department leadership, the Office of Management and Budget, and the Congressional Defense Committees, as appropriate.

85. If confirmed, what steps would you take to ensure that business IT systems developed or deployed by DOD are sufficiently aligned with best commercial business practices?

If confirmed, I would work to increase awareness within the Department of recommended commercial practices, and consider critical tradeoffs between commercially available solutions and DoD unique requirements. While some best practices are most effectively enforced through contract language, CAPE can play a critical role in guiding DoD's IT programs toward better practices and outcomes through effective program oversight and reporting requirements.

Industrial Base

86. In your view, how should CAPE factor the health and viability of the industrial base when developing cost estimates?

A healthy industrial base is essential to U.S. national security, and in order to produce accurate cost estimates, CAPE analysts must have a thorough understanding of the defense industrial base.

Science and Technology

87. What is your understanding and assessment of the role that Department of Defense science and technology programs and organizations have played and will play in developing capabilities for current and future defense systems?

DoD S&T programs and organizations have and will continue to play a central role in developing current and future defense capabilities. Nearly every revolutionary advance in U.S. military capability has origins in the DoD S&T programs that fund research in federal, academic, and industrial laboratories. The key role of S&T investment is to develop the next generation of emerging and disruptive technology that will enable the rapid delivery of superior capabilities to the warfighter.

88. If confirmed, what metrics would you use to judge the value of the DOD level of

investment in science and technology programs?

If confirmed, I would work to ensure that the S&T investment is both adequate in meeting the Department's mid- and long-term strategic goals, and balanced between a robust basic research program, applied research, and advanced technology development. CAPE would continue analyzing the value of DoD S&T investment levels through metrics such as cost effectiveness, technological risk, potential operational benefit, and impact in developing the U.S. Science, Technology, Engineering, and Math (STEM) workforce for defense and national security.

89. What role can research and technology programs that develop new methodologies or capabilities in areas like cost analysis, data analytics, and operations research play in developing new tools, techniques, and processes for use by the Director of CAPE?

Programs that develop new and more effective ways of conducting cost assessments and operations research play the role of key enablers for CAPE's mission to provide timely, insightful, and impartial analysis. If confirmed, I would ensure that the CAPE team has access to the latest analytical tools and techniques to help DoD leadership make smarter, timely decisions in an increasingly complex national security environment.

90. Are there any specific programs on which DOD should focus in this regard?

From what I understand, the Department writ large, and CAPE in particular, are pushing forward with a number of initiatives to improve the quality of data, the ease of collection, the analysis of that data, and the visualization for senior leadership. If confirmed, I would work closely with other organizations including DoD's Chief Data Officer to push the Department forward in this area consistent with the Deputy Secretary's Five Data Decrees. CAPE also continuously develops new analytic approaches and models, and if confirmed, I would seek to continue this practice and ensure that CAPE's innovations in this area are shared across the Department.

91. Should the Office of Cost Assessment and Program Evaluation dedicate greater resources to assessing future enabling capabilities (e.g., cyber forces and capabilities, artificial intelligence warfighting applications, biotechnology)? Please explain your answer.

If confirmed, I would evaluate CAPE's priorities and distribution of resources for assessing future enabling capabilities. CAPE's people are its most valuable asset in providing insightful analysis for decision support. Taking guidance from the Secretary and Deputy Secretary and working with the CAPE leadership team, if confirmed I would determine if it is necessary to reallocate limited resources to meet the goals and future direction of the Department, including key enabling capabilities, or advocate for additional resources to fully address these issues.

92. Do extant Office of Cost Assessment and Program Evaluation operations research capabilities and methods lend themselves to these kinds of analyses?

Yes, I believe so. CAPE has a strong track record of analyzing future enabling capabilities across

the organization. If confirmed, I would examine the use of current tools to address these issues, identify any gaps, and develop new capabilities and methods as necessary.

93. If confirmed, how would you plan to build and maintain a team of experts and the methodological toolkits to effectively assess the rapidly evolving emerging technologies that will be critical to the future warfighter?

If confirmed, I would work to maintain the culture of CAPE, which is characterized by a desire to rapidly acquire new knowledge across emerging technological fields. CAPE's highly talented workforce is capable of assessing new technologies and their potential impacts on future operations. I would continue CAPE's tradition of hiring talented professionals who have demonstrated analytical ability and expertise across many different emerging technical fields.

94. How can advanced commercial- and government-developed data collection, management, and analytics techniques and systems be used to support the activities of the Director of CAPE?

CAPE's core competencies in cost assessment and program evaluation depend on advanced data collection and analytical techniques. A combination of strong analytical talent and data management systems are fundamental to CAPE's ability to quickly and effectively answer critical questions needed to shape and implement the Secretary of Defense's priorities and direction.

Cyber

Offensive cyber operations offer the potential to disrupt adversary command and control, deter adversary senior leadership, and nullify adversary kinetic operations; our own cybersecurity vulnerabilities could allow adversary cyber forces to achieve the same effects.

95. How does the Office of Cost Assessment and Program Evaluation assess whether broad mission areas like cyber demand more or less investment?

It is my understanding, that in general, CAPE provides analysis and options to balance performance and risk within individual mission areas (e.g. cyber) and across multiple mission areas (e.g. non-kinetic and kinetic approaches) in the context of supporting warfighting objectives.

96. Does the Office of Cost Assessment and Program Evaluation have a role in assessing the costs and benefits of major policy and regulatory measures—for example, the Cybersecurity Model Maturity Certification program?

As I understand it, CAPE supports this kind of decision when directed by the Secretary of Deputy Secretary.

97. If the office does not currently have a role in these types of assessments, should

it?

If confirmed, I plan to learn more about these processes and determine if and how CAPE could add value.

98. In your view, does the office have the relevant expertise and technical capability to execute such assessments?

CAPE personnel have a broad range of expertise and deep technical ability. With those attributes, CAPE personnel are able to collaborate with subject matter experts to leverage additional expertise and provide independent technical assessments.

Command Climate Survey

99. Will you commit that, if confirmed, you will administer a command climate survey to the Office of Cost Assessment and Program Evaluation?

My understanding is that CAPE leadership, as a matter of long standing practice, routinely surveys the CAPE workforce on the organization's climate. If confirmed, I will continue this practice.

100. Will you commit that, if confirmed, you will brief the Senate Armed Services Committee on the results of the command climate survey you administer and any actions you plan to take in response to those results?

If confirmed, I would be happy to share the results of any command climate survey that I may administer and brief the committee on any follow up actions that I may take.

Sexual Harassment

In responding to the 2018 DOD Civilian Employee Workplace and Gender Relations survey, 17.7 percent of female and 5.8 percent of male DOD employees indicated that they had experienced sexual harassment and/or gender discrimination by "someone at work" in the 12 months prior to completing the survey.

101. What is your assessment of the current climate regarding sexual harassment, gender discrimination, and other harassment in the Office of Cost Assessment and Program Evaluation?

I am not presently aware of any issues involving harassment or discrimination within CAPE. If confirmed, I would immediately seek to validate this understanding, and act swiftly if there are issues of which I am not presently aware. Further, I would ensure that CAPE leadership and staff understand my commitment to maintaining an inclusive workplace that is welcoming and supportive of all team members.

102. If confirmed, what actions would you take were you to receive or become aware of a complaint of sexual harassment, discrimination, or other harassment from an employee of the Office of Cost Assessment and Program Evaluation?

If I were to be confirmed as the Director of CAPE and became aware of a complaint of discrimination or harassment of any kind, I would immediately notify the appropriate Human Resources and Equal Employment Opportunity offices and launch an independent inquiry into the complaint. I would take complaints of this nature very seriously, enforce accountability at all levels, leverage opportunities to train and educate leaders and the staff, and reiterate my stance that this kind of behavior has no place in the workplace or anywhere else. I would also ensure that CAPE has workplace policies and practices in place that promote respect, civility, and inclusion for all, leveraging the work of CAPE's existing Diversity and Inclusion Working Group.

Congressional Oversight

In order to exercise legislative and oversight responsibilities, it is important that this committee, its subcommittees, and other appropriate committees of Congress receive timely testimony, briefings, reports, records—including documents and electronic communications, and other information from the executive branch.

103. Do you agree, without qualification, if confirmed, and on request, to appear and testify before this committee, its subcommittees, and other appropriate committees of Congress? Please answer with a simple yes or no.

Yes.

104. Do you agree, without qualification, if confirmed, to provide this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs such witnesses and briefers, briefings, reports, records—including documents and electronic communications, and other information, as may be requested of you, and to do so in a timely manner? Please answer with a simple yes or no.

Yes.

105. Do you agree, without qualification, if confirmed, to consult with this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs, regarding your basis for any delay or denial in providing testimony, briefings, reports, records—including documents and electronic communications, and other information requested of you? Please answer with a simple yes or no.

Yes.

106. Do you agree, without qualification, if confirmed, to keep this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs apprised of new information that materially impacts the accuracy of testimony, briefings,

reports, records—including documents and electronic communications, and other information you or your organization previously provided? Please answer with a simple yes or no.

Yes.

107. Do you agree, without qualification, if confirmed, and on request, to provide this committee and its subcommittees with records and other information within their oversight jurisdiction, even absent a formal Committee request? Please answer with a simple yes or no.

Yes.

108. Do you agree, without qualification, if confirmed, to respond timely to letters to, and/or inquiries and other requests of you or your organization from individual Senators who are members of this committee? Please answer with a simple yes or no.

Yes.

109. Do you agree, without qualification, if confirmed, to ensure that you and other members of your organization protect from retaliation any military member, federal employee, or contractor employee who testifies before, or communicates with this committee, its subcommittees, and any other appropriate committee of Congress? Please answer with a simple yes or no.

Yes.