Senate Armed Services Committee Advance Policy Questions for Dr. John E. Whitley Nominee for appointment to be Director of Cost Assessment and Program Evaluation

Responsibilities and Qualifications

Section 139a of title 10, U.S. Code, establishes the responsibility of the Director of Cost Assessment and Program Evaluation (DCAPE) to provide "independent analysis and advice" to the Secretary of Defense and other senior officials of the Department of Defense (DOD) on a number of matters.

1. Having performed the duties of the DCAPE for almost a year, which of the duties and functions enumerated in section 139a do you perceive to be most critical to the effective operation of the Department?

My experience has been that all of the functions enumerated in section 139a are critical to effective operation of DoD. I don't have an analytic method for ranking them in order of importance, but I can indicate what required the greatest investment of my time and effort when leading CAPE last fall and winter (see answer to #2 below) and their immediate role and value for the current focus of improving DoD's alignment to the NDS:

- Cost estimating, JROC support, AoA guidance, and acquisition assessments (139a(d)1, 139a(d)3, 139a(d)4, and 139a(d)7): These are critical for identifying and successfully acquiring NDS capabilities.
- Planning/programming and program analysis (139a(d)2 and 139a(d)5): These are critical to improving alignment of resources to NDS priorities.
- Building analytic community (139a(d)8): This is critical to ensuring that DoD can continue to improve in the future.

2. While performing the duties of the DCAPE, which of the matters enumerated in section 139a required the greatest investment of your time and effort?

In my time leading CAPE last fall and winter, most of my time was spent on planning and programming (139a(d)2). This included three major elements: leading the FY21-25 program review process, supporting the NDS alignment review and prioritization of defense-wide programs, and assisting in the re-establishment of a future force development and design process.

3. What background and experience do you have that qualify you for this position of senior leadership in the DOD?

Most of my professional career has been spent in defense resource management. As a Ph.D. economist with three years of service as a junior professor of economics, I am well grounded in conducting analysis and the principles of resource allocation. I worked in

CAPE as an analyst and received awards for analysis on resource allocation and reform issues there. I was the director of the DHS CAPE-equivalent office for almost three years. At the Institute for Defense Analyses (IDA), I conducted numerous analyses on resource allocation, cost estimation, and reform topics, and taught and spoke on CAPE, PPBE, cost estimating, and program analysis topics. As the Assistant Secretary of the Army, I led the budgeting process and, thus, worked with CAPE from an external perspective. Most recently I led the office for approximately nine months last fall and winter. Finally, I am a veteran who brings to CAPE the experiences of being a soldier and understanding the challenges and environment of the operational military.

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

I have been involved with or supported the acquisition process throughout my professional career in defense resource management. I have been a member of acquisition oversight boards (including the senior acquisition oversight board at DHS when I directed the CAPE-equivalent office). I have conducted analyses and authored publications on acquisition issues, including papers on operating and sustainment costs, multi-year procurement contracting, and economic adjustment clauses.

5. Are there are any actions you would take to enhance your ability to execute the duties and responsibilities of the DCAPE?

I am not aware at this time of any specific actions I would take to enhance my ability to execute the duties and responsibilities of the DCAPE. However, if confirmed, I would continually evaluate my ability to execute my duties and responsibilities and raise issues, as appropriate, to the Deputy Secretary, Secretary, and Congress.

6. Given your experience performing the duties of the DCAPE, do you believe that the DCAPE has the authorities and resources necessary to execute the responsibilities assigned in law? Please explain your answer.

CAPE is a high quality organization that thrives in its role as the "think tank" and independent advisor for the Secretary and Deputy Secretary of Defense. I believe the value of CAPE has been recognized by the Department and that is why CAPE deservedly, will see modest manpower growth over the Future Years Defense Program.

7. If confirmed, and based on observations gleaned while performing the duties of the DCAPE, what innovative ideas would you consider providing to the Secretary and Deputy Secretary of Defense regarding the structure, organization, and reporting relationships applicable to the Office of Cost Assessment and Program Evaluation?

CAPE recently underwent a reorganization to better support the needs of the Department. My view at this point is that the reorganization and current reporting relationships are about right. If confirmed, I will continue to evaluate the situation.

Key Relationships

8. If confirmed, how would you structure your relationship with the Secretary of Defense and the Deputy Secretary of Defense, particularly in view of the DCAPE's independence and direct reporting relationships prescribed in law?

Having worked with both the Secretary and Deputy Secretary in previous roles, both inside and outside the Department, I believe I have a solid understanding of their priorities. My primary focus will be on providing neutral, independent, fact-based analysis to them to inform their strategic decisions.

9. In your view, should the DCAPE be authorized to engage in more direct and independent communications with the Congress, similar to the authority accorded the Director of Operational Test and Evaluation?

I am not aware of any challenges with the current authorities.

Major Challenges and Problems

10. What do you consider to be the most significant challenges you would face if confirmed and appointed to be the DCAPE?

If confirmed, the most significant challenge I would face in the position is balancing modernization investments required to meet NDS priorities with the other competing demands for DoD resources.

11. What plans do you have for addressing each of these challenges, if confirmed?

If confirmed, I will ensure the CAPE organization continues to provide analytic based options to help inform strategic decisions.

DCAPE's Role in Implementing the National Defense Strategy

12. What is your understanding of the role of the DCAPE in evaluating investments in the forward posture of the Joint Force? How does that role compare and contrast with the roles of the Military Services, the Joint Staff, and the Combatant Commands, in your view? What unique expertise or analytical capabilities does the Office of Cost Assessment and Program Evaluation possess in this area in relation to other elements of the DOD?

Through the PPBE process, CAPE is tasked to evaluate all strategic investments, to include investments in forward posture, through the lens of the NDS, Service, and Joint Concepts. Using a host of quantitative analytic tools, CAPE assessments evaluate analytic attributes like survivability, sustainability, cost effectiveness, and combat effectiveness when determining different investment options for forward posture locations. CAPE provides quantitative analysis and compares this with cost to ensure that forward posture investments are made in the options that yield the highest return on investment. CAPE's unique skillset provides Senior Leaders forward posture options and recommendations that yield the highest return on investment.

13. Does DOD have the requisite modeling, simulation, experimentation, and wargaming processes and other analytical tools—to support the Secretary of Defense and you, if confirmed as DCAPE, in rigorously evaluating, assessing, and testing the validity of DOD's force size and posture constructs? Please explain your answer.

The Department has access to a wide range of high quality analytic tools, methods, and personnel both internally within the Department and through our relations with Federally Funded Research and Development Centers (FFRDCs) and University Affiliated Research Centers (UARCs), as well as relations with private contractors and Think Tanks. If confirmed, I will work with OSD Policy and the Joint Staff to continue building analytic capacity and seek improvement in how the suite of analytic tools is applied jointly to solve our most challenging problems as well as improvement in the integration of insights from one analytic activity (e.g., wargames or experimentation) into other analytic efforts. This includes working with Policy and JS to continue reinvigorating the force development and design process.

14. What is the appropriate role of the DCAPE with respect to evaluating investments in the capabilities and capacities required to support new operational concepts of the Joint Force? How does that role compare and contrast with the roles of the Military Services, the Joint Staff, and the Combatant Commands, in your view? What unique expertise or analytical capabilities does the Office of Cost Assessment and Program Evaluation possess in this area in relation to other elements of the DOD?

As one of the leads (along with Policy and JS) for strategic analysis in support of future force development and design within the Department, DCAPE is responsible for independent analysis on the full range of capability investments and evaluating the defense future years options. This responsibility extends to evaluating how well various capabilities will support emerging operational concepts. DCAPE provides analytic support through a variety of analytic methodologies to evaluate proposed options developed by various military organizations. DCAPE also provides independent cost estimates to help Services evaluate the programs required to field new operational concepts.

15. What is the appropriate role of the DCAPE with respect to evaluating investments in the capabilities and capacity required to execute DOD operational plans? How does that role compare and contrast with the roles of the Military Services, the Joint Staff, and the Combatant Commands, in your view? What unique expertise or analytical capabilities does the Office of Cost Assessment and Program Evaluation possess in this area in relation to other elements of the DOD?

DCAPE provides independent analysis, using a host of quantitative analytic techniques, of the resource requests and risk posture associated with DOD operational plans to ensure operational plans can be executed within available resources. DCAPE engages with Services on readiness investments and potential capability investments proposed to reduce risks associated with operational plans. Other organizations are responsible for developing the plans, assessing risk, and identifying additional funding requirements associated with operational plans.

16. If confirmed, how would you structure your relationship with the Under Secretary of Defense for Policy, particularly as regards the review, analysis, and evaluation of programs for executing approved strategies and policies? On what types of projects would you expect to collaborate with the Under Secretary of Defense for Policy?

The Under Secretary of Defense for Policy is the primary partner for DCAPE on strategic analysis, evaluating how well investment options align to the NDS, and establishing DoD strategic direction and priorities for the future force. During my time as the Acting / Performing the Duties of DCAPE, I worked collaboratively with Policy leadership to provide analytic support to strategy decisions, review operational plans, develop important strategic guidance documents, and ensure that the defense program invests in capabilities to achieve the NDS. Policy, CAPE, and the JS lead the strategic integration function of the Department, overseeing strategic analysis and force development and design.

In its 2018 report, the National Defense Strategy (NDS) Commission recommended that Congress increase the base defense budget at an average rate of three to five percent above inflation through the Future Years Defense Program (FYDP). The Bipartisan Budget Act (BBA) of 2019 set the DOD topline at \$738 billion for FY 2020 and \$740.5 billion for FY 2021.

17. Do you agree that 3-5% real budgetary growth through the FYDP is required to implement the 2018 NDS effectively? Would 3-5% real growth be adequate? How should that increase be allocated between modernization, readiness, personnel, and other activities? Please explain your answer.

I agree with Secretary Esper's remarks that, at a minimum, a 3-5% real budgetary growth is necessary to implement the NDS. The Department is still recovering from the years of

budget cuts that were mandated by the Budget Control Act of 2011. Growth is needed to catch up on the modernization investments that were either delayed or reduced in order to meet the fiscal targets.

18. Accounting for inflation, spending in FY 2021 would decrease slightly. In your view, what would be the effect of such a decrease on the Department's ability to implement the NDS?

I contributed to the development of the FY 2021 President's Budget submission. Protecting NDS investments and making new additional investments (e.g., in space) was very difficult because of the declining (in real dollars) topline. Ultimately, we were able to make continued NDS investments because of the aggressive reform agenda implemented by the Secretary that freed resources from lower priority programs.

19. What specific resource shortfalls are likely to hamper DOD's execution of the 2018 NDS, in your view?

Without 3-5% real growth, i.e., with a flat or declining topline, DoD will be forced to continue aggressive reform efforts that reduce funding for low priority programs. This includes defense-wide reforms, Combatant Command reforms, and Service reforms. Reducing current operations, cutting legacy platforms, and taking risk in current readiness may be necessary to ensure continued growth in investment in capabilities needed for near peer competitors as directed in the NDS.

20. In your view, how will funding shortfalls in other federal agencies impact DOD's execution of national security and defense plans and strategies?

A whole of government approach is required to implement the NDS. Funding shortfalls in other federal agencies may have a negative and reverberating effect across the entire government, to include the DoD. DoD and other federal agencies must work within funding realities to execute the national strategy and defense plans and strategies.

21. If confirmed, by what standards would you measure the adequacy of DOD funding going forward?

The ultimate metric is the ability to defend the homeland and achieve our national security goals. If confirmed, I will closely monitor readiness trends, acquisition milestones, and Service program tradeoffs to assess the adequacy of DoD funding. Additional, I fully support the data-driven approach that Secretary Esper and Deputy Secretary Norquist are implementing and will use those measures to inform CAPE work, if confirmed.

DOD Readiness

22. How would you assess the current readiness of the DOD—across the domains of materiel and equipment, personnel, and training—to accomplish the broad range of potential missions U.S. forces could be required to execute, as envisioned by the 2018 NDS?

The large budget increases appropriated by Congress in the early years of the Administration drove significant readiness improvements, beginning to dig DoD out of the hole created by the Budget Control Act cuts. Maintaining this positive trend in readiness recovery will become more challenging if 3-5% real growth is not maintained and DoD faces flat or declining budgets.

23. What is your assessment of the risk the Military Departments and Services have accepted in regard to the readiness of their forces to execute Combatant Commanders' operational plans associated with the 2018 NDS?

It appears that military readiness is generally improving, which is a positive trend for the Combatant Commanders ability to execute operational plans. DoD is improving its ability to quantitatively assess its readiness to execute OPLANS with the work of JS and P&R. If confirmed, I will work closely them to track readiness trends and the evolution of operational plans to ensure key near-term funding issues can be assessed in the PPBE process.

24. If confirmed to be the DCAPE, what would be your role in evaluating and reporting on the readiness of DOD Components? In mitigating readiness gaps and shortfalls?

If confirmed, I would provide independent assessments of resource related readiness issues and work closely with Military Departments, P&R, and the JS to evaluate options in the PPBE process to address shortfalls.

25. Does DOD have the analytic tools and expertise to assist you in measuring joint force readiness across the spectrum of challenges presented by the strategic environment—from low intensity, gray-zone conflicts to protracted, high-intensity fights with major-power rivals? Please explain your answer.

The Department has the tools and expertise available to analyze strategic warfighting environments across the spectrum of conflict. However, if confirmed, I would like to see improvements in the ability to account for non-kinetic effects into our current analytic approaches and in the ability to conduct analytic work at the appropriate classification level.

26. Presuming sustained, predictable, and suitably increased funding going forward, how long would it take, in your view, to repair readiness fully and ensure that U.S. forces are ready to fight, when and where needed?

Readiness recovery timelines are unique to each Service and depend on a number of factors beyond funding. If confirmed, I will work with the Military Departments and OSD Stakeholders to keep readiness a focus for the Department.

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

27. If confirmed, how would you structure your relationship with the Director of the Office of Management and Budget? On what types of projects would you expect to collaborate with the Director?

During my time as Performing the Duties of the Director of CAPE, the Department made a conscious effort to ensure OMB was involved throughout the PPBE process. If confirmed, I would continue these practices as OMB input and visibility into DoD decision making is value added in terms of supporting the most critical DoD priorities. In addition to its oversight role, I would expect OMB to be involved with CAPE on major reform issues.

28. If confirmed, how would you structure your relationship with the Under Secretary of Defense for Comptroller, particularly with respect to the preparation of materials and guidance for the Planning, Programming, Budgeting, and Execution system? On what other projects would you expect to collaborate with the Under Secretary of Defense for Comptroller?

The Department's PPBE process requires close coordination with the Under Secretary of Defense for Comptroller to ensure the programing objectives are supported by the budgeting process. This relationship is fundamental to ensuring NDS and Secretary priorities are resourced and analytically informed, especially in Department reform efforts. I anticipate working with the Comptroller and Policy organizations to develop guidance for developing the Defense Program, and to supporting the Comptroller in any related needs that arise from this collaboration.

29. Informed by your service performing the duties of the DCAPE, what do you perceive to be the duties and functions of the DCAPE with regard to the management of DOD planning and programming processes across the FYDP?

The Director of CAPE is seen as the key advisor to the Secretary of Defense in the development of the Department's Future Years Defense Program. In that role, the Director is tasked with providing the Secretary programmatic options, backed by robust independent analysis, to implement Secretary priorities and the NDS. This function is key to ensuring the funding profiles for major strategic programs are properly resourced.

30. Informed by your service performing the duties of the DCAPE, what do you perceive to be the duties and functions of the DCAPE with regard to the program review phase of the PPBE process?

CAPE runs the program review process in DoD. During the Program Review, DCAPE is tasked with taking a strategic look at Military Department, Defense-Wide, and Combatant Command investment plans to ensure programs are properly funded and are aligned to the NDS and strategic concepts. If confirmed, I am committed to maintaining transparency and providing holistic stakeholders views in the PPBE to DoD leaders.

31. In your view, how well does the current PPBE process connect the 2018 NDS to DOD planning and programming processes?

PPBE, if implemented as envisioned, allows for a strategy driven and structured approach to ultimately achieving budget outcomes. If confirmed, I will ensure CAPE continually emphasizes and assesses NDS alignment throughout the PPBE interactions.

32. In your view, are the programs and resources required to generate the capabilities necessary to implement the NDS properly prioritized in the PPBE process? If confirmed, how would you realign or refocus DOD programs and funding, if at all?

Yes, during my time as Performing the Duties of the CAPE Director, I participated in strategic discussion that consistently prioritized NDS implementation, including PPBE discussion. NDS implementation in the program is an ongoing process as new concepts and technology developments emerge.

Some commentators have observed that in matters related to the realignment of strategic objectives with resources via the PPBE, DOD's size, structure, and culture favor the "status quo."

33. Do you agree with this assessment? Please explain your answer.

In my experience, the PPBE process demands rigor in program decisions, which may require time to accomplish. However, over time the Department can shift resources toward strategic ends. The Department must also closely work with Congress to gain support for the proposed strategic shifts in resources.

34. Given that, for the most part, PPBE processes operate under the presumption that long-term planning and programming decisions will NOT and should NOT change—except by degrees, can the "regular" PPBE cycle iterate fast enough to respond to changes in strategic or programmatic direction, in your view? Please explain your answer.

I believe the PPBE process is flexible enough to react to changing strategic or programmatic direction. Leadership priorities and attention are essential to full implementation of strategic direction. I also believe it's important to have a rigorous assessment of options and analytic underpinning for strategic shifts. Finally, the

Department should invest in capabilities, including legacy capabilities, if they support the strategy.

35. Do you agree with the assertion that the PPBE process routinely accords too much weight to Military Department and Service priorities, rather than to DOD-wide priorities? Please explain your answer.

I believe PPBE allows for an appropriate balance of all stakeholder views. There are significant efforts underway to ensure the future joint requirements can be assessed and considered for funding.

36. Are Combatant Commanders' priorities adequately reflected in the PPBE process, in your view?

Yes, Combatant Command priorities are afforded ample opportunity to influence the Service and Department-level PPBE development process.

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

Yes, the PPBE process is flexible enough to react to urgent programmatic changes within the budget cycle.

38. In your view, what changes, if any, should be made to the DOD programming and budgeting process to create a system agile and responsive enough to account for fast-paced changes in the global threat environment, as well as the rapid pace of technological change? What changes should be made in Congressional authorization and appropriations processes?

If confirmed, I would likely work with the Deputy Secretary to continue his efforts to create a greater emphasis on analytics in the planning phase, thereby allowing senior leaders more time to provide guidance for the Department before CAPE begins to build specific programmatic options and recommendations.

39. In your view, how could the Deputy's Management Action Group be more effective in ensuring that issues with critical resourcing implications are addressed in a manner that aligns with the Secretary of Defense's priorities and the Department's planning and programming schedule? Please explain your answer.

If confirmed, I will support efforts to continue increasing the use of data in DMAG discussions as well as earlier DMAG engagements on analytic results to support decisions in planning, programming, and budgeting.

The DOD Analytic Workforce and Analytic Tools

Section 139a(d)(8) of title 10, U.S. Code, requires the DCAPE to "lead[] the development of improved analytical skills and competencies within the cost assessment and program evaluation workforce of the Department of Defense and [the development of] improved tools, data, and methods to promote performance, economy, and efficiency in analyzing national security planning and the allocation of defense resources." Section 2334(h) of title 10, U.S. Code, requires the Secretary of Defense to ensure that the DCAPE has sufficient professional staff of military and civilian personnel".

40. In your view, is the Office of the Director of Cost Assessment and Program Evaluation properly sized? Does the Office comprise military and civilian personnel with the appropriate capabilities to carry out the DCAPE's duties and responsibilities? Please explain your answer, including describing the factors on which you base your response.

The size of CAPE determines the breadth and depth of activities CAPE can engage on. In my experience as performing the duties of the Director, I found numerous important decision areas of DoD (covered in the wide range of questions in this document) that CAPE invested relatively little analytic time on. This challenge was recognized prior to my arrival and CAPE is currently programmed to gain 38 additional civilian billets over the FYDP. I support this planned growth and believe that it will further enable CAPE's ability to recruit high-quality analysts and further posture CAPE to meet the requirements levied by the Secretary and Congress.

41. In your view, are the cost assessment and program evaluation offices and functions of the Military Departments and Defense Agencies properly sized? Do these offices comprise military and civilian personnel with the appropriate training and qualifications to carry out their responsibilities? Please explain your answer, including describing the factors on which you base your response.

On the whole, cost assessment and program evaluation offices are properly sized. Many of the challenges I have witnessed in my time in DoD are related to education and training in addition to the resources and data available for existing analysts to perform their roles.

42. If confirmed to be DCAPE, what specific steps would you take to improve efforts to grow, train, and maintain analytic expertise within your workforce, as well as in the cost assessment and program evaluation workforce in each Military Department and Defense Agency?

CAPE recruits highly talented analysts and if confirmed, I would support that approach. For the community as a whole, I support CAPE's role in establishing training requirements for the cost community and would like to expand the discussion to the broader analytic community.

43. In your view, does the Office of the Director of Cost Assessment and Program Evaluation make appropriate use of the expertise and resources of the cost assessment and program evaluation offices of the Military Departments and Defense Agencies?

As a small organization covering nearly every aspect of the Defense Program, it is essential that CAPE rely on Service and other agency expertise. CAPE regularly considers outside products, views, and experts in its work.

44. If confirmed, what would you do to leverage these capabilities more effectively?

If confirmed, I would continue to encourage organizations within the Department to be transparent and share best practices to further enhance the Department's analytic and cost community.

45. What impact do you expect the Defense-Wide Review to have on the organization and staffing of the Office of Cost Assessment and Program Evaluation?

As with every OSD office, CAPE provided options for work to shed or reassign during last year's Defense-Wide Review. CAPE worked very hard to ensure these reforms were crafted to minimize impact to work products and, as much as possible, focus on improving efficiency. I do not expect DWR changes in CAPE's budget to significantly impact CAPE's core mission.

46. What hiring authorities or other personnel management flexibilities have proven effective in building and maintaining the Office of Cost Assessment and Program Evaluation workforce? Why?

CAPE leverages fellowships, internships, and Schedule B hiring authorities to find personnel with the correct capabilities to perform the role of a CAPE analyst.

47. What additional hiring and pay authorities would be helpful for the Office of Cost Assessment and Program Evaluation as it tries to build and maintain its workforce and expertise?

Being granted a Direct Hire Authority would allow CAPE to be more competitive in a tight job market to recruit highly qualified candidates who possess the right education and experience.

48. Would the DOD cost assessment and program evaluation workforce writ large benefit from greater centralization of workforce strategic planning and management, in your view?

I believe it is important to maintain distinct organizations so that many viewpoints are incorporated into the analytic and decision making process and that organizations can tailor to best support decision-making within their purview.

49. Is the cost assessment and program evaluation community across DOD prepared to sustain requisite capacity and capability during the impending workforce "bath tub"—a descriptor often used to illustrate graphically the impending potential loss of expertise due to the retirement of large numbers of baby boomers and the lack of trained and experienced personnel to fill the vacancies?

CAPE is well positioned to mitigate any potential loss of expertise by leveraging our current hiring authorities and approaches. However, Direct Hire Authority would increase CAPE's flexibility and competitiveness.

50. Do you believe that Monte Carlo and linear programming-based modeling and simulation techniques used by the Office of Cost Assessment and Program Evaluation are sufficient to meet DOD's analytic requirements?

I believe Monte Carlo and linear programming-based M&S techniques are two of the many tools required to complete the breadth of analysis required by CAPE. Continual evaluation of tools and techniques is a good practice. If confirmed, I would work to have better integration across all the types of analytic tools (e.g., M&S, experimentation, exercises, wargames, empirical analysis, etc.) available to ensure that the best information is being used to inform leadership decisions. I believe it is critical to use the most effective analytic method available no matter what it is.

51. What role do you envision science and technology activities in domains like cost analysis, data analytics, and operations research in the development of new tools, techniques, and processes could play in enhancing Office of Cost Assessment and Program Evaluation analyses?

I envision the role of S&T to continue to push the technical boundaries in IT systems, computation power, and new algorithms to reduce calculation times and to improve the power of analytic tools. However, tools are a means to analysis and CAPE's most important asset is its analysts who understand how to most effectively wield these tools to rapidly support leadership decisions.

52. If confirmed, how would you lead the Office's modernization of its modeling and simulation capabilities? In particular, what would you do to incorporate modern techniques in econometrics and data science?

If confirmed, I will continue to ensure that CAPE remains a leader of analytic capabilities within the Department and continues to use the most appropriate tools to answer the questions asked. As a trained economist, I believe econometrics, as well as data science, are critical approaches. If confirmed, I would uphold CAPE's tradition of bringing in

highly talented analysts with a broad range of academic backgrounds and experience, as well as embrace efforts already underway to infuse data science into the management of the Department.

53. What are some of the most modern and effective tools and techniques for risk identification and modeling, advanced cost modeling and analysis, and advanced program evaluation, and how would you employ these tools and techniques to improve DOD operations and management?

While maintaining currency in the latest tools and techniques is important, I believe that employing talented analysts who know the best methods and tools to apply for the question at hand is critical. If confirmed, I would work to ensure that CAPE hires top quality analysts and that they have the resources and training needed to apply modern approaches to their work.

54. In your view, which DOD official(s) or organization(s) should be responsible for developing requirements for and building the analytic tools—including data collection and analysis tools—DOD needs to improve management decision-making, risk management, and outcome evaluation?

The Department employs numerous analytic tools - including models and simulations and data science - many of which individual analysts tailor to their specific analytic questions. I do not believe any single office can be responsible for setting the requirements or building the large diversity of tools needed. Increasing transparency and managing the knowledge gained through the many analytic approaches employed across the Department are areas I would work to improve, if confirmed.

55. Should the DCAPE have independent resources and budget for the development of these types of capabilities and tools, in your view?

CAPE is responsible for the Joint Data Support and CADE groups, who provide knowledge and information management for the force planning community and the cost community. If confirmed, I would happy to examine whether these resources are adequate or if additional resource would be helpful.

Data

Section 2222(e)(6)(C) of title 10, U.S. Code, provides that the DCAPE "shall have access to data for the purpose of executing missions as designated by the Secretary of Defense." This Committee perceives that DOD still lacks consistent data elements and definitions that would enable it to accurately compile data across the Department and compare costs across different programs and organizations. Further, critical information on program performance is still hoarded in one-off local systems that do not feed into the Department's official records.

56. In your view, does the DCAPE have access to all of the DOD and other data required to execute his/her missions? Please explain your answer.

My understanding is that CAPE currently experiences good access to data and that its access is sufficient to perform its mission. If confirmed, I will continue to pursue new data sources and protect CAPE's access to what is currently available. CAPE is continuing to make strides improving the access and timeliness of data, particularly with implementation of the FlexFile concept that provides access to contractor internal business system data and updates to the Cost Assessment Data Enterprise (CADE) web page. The area where additional attention is needed is in the education and training of the cost assessment workforce.

57. What is your assessment of DOD's ability, using current systems and processes, to collect and maintain accurate and complete data to inform DCAPE's cost assessment and program evaluation functions?

There has been improvement in the Department's ability to collect data on its systems and processes. Additional work needs to be done to ensure to improve efficiency and accuracy of our systems. If confirmed, I will support Secretary Esper's and Deputy Secretary Norquist's efforts to increase the use of data and performance measurement in strategic decision making.

58. What are the barriers that prevent the Department from collecting the data it needs to analyze and improve its processes and programs? If confirmed, how would you work to overcome those barriers?

The Department faces challenges including legacy data systems, stovepiped data silos, and limited analytic expertise. I believe CAPE has had some success addressing these challenges in cost reporting data. If confirmed, I will work with stakeholders across the Department to identify additional opportunities for improvement. CAPE could potentially leverage existing authorities to address issues as they are identified.

59. If confirmed, on what initiatives would you recommend the Department focus to improve its collection of accurate and complete data? How would the Office of Cost Assessment and Program Evaluation use such data to significantly improve mission execution and management processes?

Better use of data can significantly improve almost any of the Department's mission execution or management processes. If confirmed, I would seek areas that could quickly deliver results to the Department's mission execution, management, or decision making processes.

Recent acquisition reforms have authorized the delegation of decision-making authority for most major weapons systems acquisition programs to the Military Departments. This devolution of authority renders even more important the availability of

high-quality enterprise-wide data and unfettered DOD-level access to that data to conduct program oversight and inform portfolio management decisions. In particular, section 2334(c)(2) of title 10, U.S. Code, requires the Secretary of Defense to ensure that the DCAPE has "timely access to any records and data in the Department of Defense (including the records and data of each Military Department and Defense Agency, classified, and proprietary information) that the Director considers necessary" to carry out his duties in regard to cost estimation and analysis.

60. What is your assessment of the current quality of enterprise-wide data relating to acquisition programs?

For programs that exceed \$100M, CAPE is making strides to improve the quality and timeliness of cost reporting data. For smaller dollar programs, CAPE needs to work with the Service Cost Centers to expand data availability. Continuing attention is also needed by CAPE to keep in synch with revisions of internal acquisition reporting systems throughout the acquisition community.

61. What is your assessment of the DCAPE's ability to access such data in its organic form, without constraint or condition?

CAPE has a proven and operational system to collect data. There have been a few issues to resolve in the transition to FlexFiles but these issues are normal for a new reporting system and CAPE is working through them methodically. An area that needs attention is the new programs and offices - e.g., Space Defense Agency.

62. If confirmed, what actions would you take to improve the quality and accessibility of data relating to major and middle tier defense acquisition programs?

With the implementation of DoDI 5000.73, CAPE has brought MTA efforts within the standard reporting process. If confirmed, I will work to define the mechanism of reporting for MTA as well as other programs that fall within the umbrella of DoDI 5000.73 and stress the importance of the reporting requirements of major defense acquisition programs.

63. Noting the significant progress the Department has made in implementing the Cost Assessment Data Enterprise (CADE), what additional steps are needed to ensure valid and reliable data are available to the professionals across DOD who need it?

If confirmed, I would focus on the education and training of the cost assessment workforce and establishment of relationships and mechanisms for new development agencies, such as the SDA, to implement cost reporting.

Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) memorandum of June 15, 2020, Data Transparency to Enable Acquisition Pathways,

directing "the Service and Component Acquisition Executives to implement measures, operations and identify specific accountabilities to ensure all acquisition and sustainment (A&S) data is trusted, transparent, and usable by the Department. The A&S Data and Analytics Strategy, when implemented, is intended to aid the data-driven decision-making necessary to speed delivery of warfighting capabilities."

64. What role will DCAPE play in or with this new system? What new responsibilities will DCAPE take on to effectuate this role?

CAPE employs a large number of program and cost analysts with extensive experience in aggregation and analysis of data from disparate systems. CAPE's primary role in this effort is to provide subject matter expertise on matters of data governance and modeling to ensure that the strategy is consistent with best practices for data-driven decision support.

65. What opportunities would this data set present for better analysis and decision making, in your view?

This data set will present new opportunities for cross-Service comparison of acquisition program data. With a data model that ensures apples-to-apples content across programs, the possibility of gleaning granular lessons learned from across Services and applying those lesson in new contexts should be drastically improved.

66. If confirmed, how would you build on the CADE and partner with the USD(A&S) to enable a more holistic data management and analytics capability for the Department?

CAPE and USD (A&S) have a long history of successfully collaborating on data collection and management (example - EVM CR). With the advent of the new Adaptive Acquisition Framework and additional acquisition pathways, CAPE will need to continue our collaboration to ensure that CAPE data systems support A&S data initiatives wherever possible and vice versa. CAPE's recent update to DoDI 5000.73 reflects this goal in the form of newly issued guidance for contractor cost data collection on Middle-Tier programs. If confirmed, I would work with the evolving DAES reporting structure to facilitate an improved flow of information for the cost community.

Acquisition

67. If confirmed, how would you structure your relationship with the USD(A&S), particularly as regards major defense and middle tier acquisition programs?

The partnership between DCAPE and USD(A&S) is critical to ensuring the success of the Department's acquisition programs. CAPE advises the USD(A&S) on schedule, resource allocation, affordability, systems analysis, cost estimation, and the performance implications of selecting particular acquisition pathways. It is especially important for

CAPE to maintain its collaborative relationship with USD(A&S) with the advent of new pathways under the Adaptive Acquisition Framework. The Department must leverage the flexibility of new pathways such as Middle Tier Acquisition to provide new capabilities to the warfighter at the speed of relevance, and continue to exert the analytical and administrative rigor of the Major Capability Acquisition (formerly Major Defense Acquisition Program, MDAP) pathway for larger and more traditional forces. For example, CAPE's Independent Cost Estimates are an important consideration when programs progress through the traditional milestones of the Major Capability Acquisition pathway, and CAPE will serve a similar role when considering whether programs under the Middle Tier Acquisition pathway should progress from Rapid Prototyping to Rapid Fielding.

68. On what other types of projects would you expect to collaborate with the USD(A&S)?

If confirmed, I anticipate collaboration with USD(A&S) on all the acquisition pathways under the Adaptive Acquisition Framework, including Major Capabilities, Urgent Operational Needs, Software Acquisition, Defense Business Systems, and Acquisition of Services, on the collection, evaluation, and dissemination of many important data sources and repositories such as those that house Select Acquisition Reports (SARs), and on product support policies and data collection for the long-term sustainment of weapon systems.

69. What do you perceive to be the appropriate role of the DCAPE across the acquisition process?

The DCAPE's oversight of the entirety of DoD's capability portfolio through cost estimating, program analysis, etc. provides a unique perspective on the status of every weapon system, initiative, and urgent need that affects warfighters. This holistic view informs the DCAPE's recommendations in any area of the acquisition process from requirements definition to portfolio tradeoffs to the feasibility of acquisition strategies based on past experience. In particular, the DCAPE's expertise in cost analysis ensures that decisions in these acquisition areas 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.

70. If confirmed, how would you structure your relationship with Military Department and Service Acquisition Executives and the Program Executive Officers and Program Managers of major defense and middle tier acquisition programs across the Department, particularly in executing the DCAPE's responsibility to prepare independent evaluations of defense acquisition programs?

If confirmed, I would continue the structure in place, which is well aligned to the Services and PEOs. I would also be committed to working with Service Acquisition Executives to foster and formalize these relationships to ensure that CAPE maintains the

level of subject matter expertise necessary to execute detailed independent cost assessments for the DoD.

Cost Estimation and Analysis

Section 2334 of title 10, U.S. Code, requires the DCAPE to prescribe policies and procedures for the conduct of cost estimation and cost analysis for the acquisition programs of the Department of Defense. On May 13, 2020, while performing the duties of the DCAPE, you issued the most recent iteration of DOD Instruction 5000.73, *Cost Analysis and Guidance Procedures*.

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

Credible cost and schedule estimates are foundational to predictable programs that deliver as promised and have the necessary resources to implement the acquisition. If confirmed, I will continue to prioritize manpower, funding, and attention to maintain the capability to develop sound, unbiased cost estimates.

72. In what significant ways does the iteration of DOD Instruction 5000.73 you issued differ from prior versions of the Instruction? What new policies and procedures did it promulgate? How do you envision these new policies and procedures affecting cost estimation and analysis and the collection of cost data across DOD?

The new DoDI 5000.73 primarily implements changes associated with delegation of milestone decision authority to the Service Acquisition Executives and new procedures for Middle Tier cost processes. The changes associated with the advent of Service-level MDA programs will facilitate CAPE involvement in Service acquisition decision-making processes. The Middle-Tier related changes will ensure that the Department has the necessary cost data and analysis to ensure sound decision-making in an accelerated acquisition environment.

73. What gaps or deficiencies in the conduct of cost estimation and analysis in DOD remain to be corrected, in your view? If confirmed, what steps would you take to effectuate such improvements?

With respect to Middle Tier programs, the DoD needs to continue to develop full funding policies and alignment with cost estimates. If confirmed, I will work to ensure the Department has clear policy guidelines and that those policies are followed in execution. This will take close collaboration with the Services to gain their buy-in and achieve visibility across the costing enterprise.

Section 2334(a)(4) of title 10, U.S. Code, requires the DCAPE to "issue guidance relating to full consideration of life-cycle management and sustainability costs in major

defense acquisition programs and major subprograms." In a February 2019 report, GAO asserted that approximately 70 percent of the life-cycle costs of a weapon system are incurred in the system's operating and support phase.

74. How would you rate the Department's performance in accurately estimating operating and support costs for major defense acquisition programs?

There is opportunity for improvement in accurate O&S cost estimating, which can positively influence system design, ensure that sustainment factors are fully considered at key life-cycle management decision points, and that appropriate measures are taken to reduce O&S costs. If confirmed, I will support current efforts to improve cost data collection system and historical cost reporting systems Visibility and Management of Supporting Costs (VAMOSC).

75. How would you rate the Department's performance in tracking and assessing operating and support costs for major defense acquisition programs?

There is opportunity for improvement. If confirmed, I will support efforts to improve cost data collection system and historical cost reporting systems (e.g., VAMOSC) to be able to track and assess O&S costs.

76. Should Congress extend DCAPE's authority in this regard to cover middle tier acquisition programs?

At this time, I do not believe any changes to DCAPE's authority are required. Section 2334 of title 10, U.S. Code, requires the DCAPE to prescribe policies and procedures for the conduct of cost estimation and cost analysis for the acquisition programs of the Department of Defense. On May 13, 2020, while performing the duties of the DCAPE, I issued the most recent iteration of DOD Instruction 5000.73, Cost Analysis and Guidance Procedures which addresses MTA requirements.

77. How would you rate the Department's performance in discussing risk, the potential impacts of risk on program costs, and approaches to mitigate risk in cost estimates for major defense acquisition programs?

The Department considers these risks in multiple different forums and decision making processes. With the delegation of most of the ACAT ID programs to the Services, it appears the Department is experiencing a higher tolerance for cost and schedule risk. If confirmed, I will closely monitor risk mitigation actions, advocate for continued dialogue on risk, and work with stakeholders to update policies to ensure the Department can achieve its desired program outcomes.

78. How should DOD's cost estimation and analysis community incorporate assessments of the health and viability of the industrial base in developing cost estimates of major defense acquisition programs?

I believe that DoD's cost community must remain industrial base experts, especially as the number of prime contractors shrinks and incorporate the resulting effects for cost and schedule into cost estimates.

79. What steps can the Office of Cost Assessment and Program Evaluation, working in coordination with acquisition programs, take to ensure life-cycle cost estimates (LCCE) are more reliable, accurate, and comprehensive?

Data sharing and discussion of estimates is key to improvement of LCCEs across the Department. If CAPE and acquisition program offices are able to have informed discussions about estimate source data and methodologies, the likelihood of misrepresentation, poor assumptions, and other estimating issues goes down dramatically.

80. What steps has the Office of Cost Assessment and Program Evaluation taken in the past 3 years, and what would you do, if confirmed, to increase the attention and analytical rigor invested in these LCCE?

On May 13, 2020, while performing the duties of the DCAPE, I issued the most recent iteration of DOD Instruction 5000.73, Cost Analysis and Guidance Procedures which addresses life cycle cost estimating. Additionally, CAPE has put significant effort into education and training of the cost estimation work force to ensure they have the required analytic skills.

81. Would you view as suitable a "Nunn-McCurdy"-type system for programs that substantially exceed estimates for operating and support costs? Please explain your answer.

Yes, a similar statute for O&S costs would necessitate programs to focus on O&S costs early on in the weapon system life cycle. It would hold program offices accountable and would force the Department to enable the policies to manage and report those costs.

82. If confirmed, what steps would you take to advocate for and influence adoption of a life cycle focus as the underpinning of effective cost estimation and product support?

If confirmed, I will work to ensure 5000.73 Cost Analysis and Guidance Procedures are implemented as envisioned, including those for sustainment cost estimating. I will also work to bring to fruition VAMOSC to ensure the Department can use O&S data to inform program decisions.

83. If confirmed, what steps, if any, would you take to ensure that life cycle maintenance and sustainment requirements are properly funded across the PPBE process?

In our 5000.73 Cost Analysis and Guidance Procedures, it states DCAPE assesses whether a proposed program's baseline and associated budget provide the necessary confidence that the program can be completed without the need for significant adjustment to future program budgets.

- (1) Following a milestone (or equivalent acquisition) decision, CAPE will verify that the DoD Component has fully funded the program, in accordance with the full funding certification made at the milestone, in all Program Objective Memorandum or President's Budget submissions to OSD.
- (2) If DCAPE identifies non-compliance during the development of the President's Budget submission, DCAPE will request the Service Cost Agency or DoD Component provide any new cost and technical baseline descriptions that support the new position.

84. In your view, how can lifecycle cost data be applied to anticipate requirements for new or replacement items?

The DoD cost community has devoted significant effort to training and developing cost estimators to identify and employ cost data from analogous systems in the development of requirements for new items. CAPE can continue to improve this approach by emphasizing the central collection of corresponding non-cost data to help identify analogous characteristics (e.g., horsepower, thrust, weight, etc.).

The FY 2017 NDAA mandated an independent study on the consideration of sustainment in the weapons systems life cycle. The study found that DOD had not given proper consideration to sustainment issues during the development and acquisition process. The FY 2019 NDAA mandated that DOD review and implement the findings of the study, as appropriate.

85. Have you reviewed the findings of this study?

Yes.

86. If confirmed, which of the study recommendations do you believe it appropriate to implement? Please explain your answer.

The published CAPE DoDI 5000.73 (Cost Analysis Guidance and Procedures) and the CAPE Operating and Support Cost Estimating Guide are the primary means of implementation of the cost and taxonomy recommendation. DODI 5000.73 provides DoD policy for O&S cost estimating, analysis, and reporting. Additionally, the CAPE Operating and Support Cost Estimating Guide details the implementation of the DOD common O&S cost taxonomy. This taxonomy can serve as a structure for cost reporting on sustainment (O&S) contracts. In addition, in response to Section 832 of the FY 2019 NDAA (Public Law 115-232) criteria to include: developing a common data repository for all sustainment-related data in a manner similar to DAVE; create and implement common data definitions, structure, and business rules for sustainment cost data; provide a consistent, predictable funding stream for O&S cost databases, prioritizing department-

wide accessibility; develop a common data structure, taxonomy, dictionary for all three VAMOSC systems; establish a common logon for the VAMOSC systems. If confirmed, I will work to ensure CAPE implements the Enterprise Visibility and Management of Operating and Supporting Costs data system.

Section 2334(a)(6) of title 10, U.S. Code, requires the DCAPE to conduct independent cost estimates and cost analyses for certain major defense acquisition programs at key points in the acquisition process and "at any other time considered appropriate by the Director or upon the request of the USD(A&S), or the milestone decision authority."

87. In your view, does the Office of Cost Assessment and Program Evaluation currently have the staffing and resources necessary to perform this function, or are additional resources be required? Please explain your answer.

CAPE currently has sufficient resources to conduct or review independent cost estimates for MDAP acquisition milestones and decision reviews. With the implementation of sustainment reviews, CAPE's current resources could become stretched. In addition, organizational changes to Navy's Service Cost Agency could place an additional burden on CAPE resources. If confirmed, I am committed to continually assessing the staffing needs of each CAPE function and, if necessary and appropriate, advocating for the resources CAPE requires to complete its core mission.

88. What is your view of the extent to which it would be appropriate to use Federally Funded Research and Development Centers or other contractors to assist in performing this function?

CAPE's organizational and analytical independence are critical to the process of developing sound, unbiased cost estimates. My view is that FFRDCs are generally more appropriate for specific analytic work such as a study on price escalation factors. Further, there is a legal prohibition against contracting for inherently governmental functions that, of course, must be honored.

89. During your service performing the duties of the DCAPE, how many requests for independent cost estimates and cost analyses did you receive from the USD(A&S) or milestone decision authorities, and to which programs did these requests pertain? Were you and Office of Cost Assessment and Program Evaluation personnel able to conduct these estimates and analyses, as requested?

During FY20, CAPE has conducted a total of 8 ICEs: Alternative Chemical Weapons Assessment (ACWA), M1097A Family of Vehicles (PIM), Combat Rescue Helicopter (CRH), Joint Lightweight Tactical Vehicle (JLTV), Future Frigate (FFG-X), Terminal High Altitude Air Defense (THAAD), F-35, GPSII Follow on (GPSIIIF). Additionally, CAPE supported SASC directed reviews for the USMC Heavy Lift Helicopter, and JSF

EOQ Estimate of Savings. Yes, we were able to complete these estimates and analyses as requested.

90. Are there particular points in the acquisition process, other than those required by statute, at which you think that independent cost estimates and cost analyses would be appropriate?

Sustainment reviews are currently not required for Middle Tier programs. Given the size and importance of some of the MTAs programs in progress, conducting an independent cost estimate in conjunction with a sustainment review might be appropriate.

91. The DCAPE has an important role in conducting independent cost estimates. How often does the Office of Cost Assessment and Program Evaluation arrive at a substantially different cost estimate (+/- 10%) than the Military Department or Service and the program office, and what are some of the key drivers of estimate differences? What specific steps does the Department need to take to improve the realism of these cost estimates?

Since the passage of Weapon Systems Acquisition Reform Act of 2009 (WSARA), there have been fewer than ten instances where the difference between the CAPE estimate and component cost position has exceeded 10%. In fact, the average difference between the two estimates has been 2.0% over that same time period. The Department has improved the realism and accuracy of estimates through increased collection of contractor cost, which we have to continue to emphasize in order to produce realistic cost estimates.

The DCAPE is further required to review all cost estimates and cost analyses conducted by the Military Departments and Defense Agencies for major defense acquisition programs other than those covered by section 2334(a)(6). At certain points in the acquisition process, the Director is required to determine whether such estimates are reasonable.

92. In your view, does the Office of Cost Assessment and Program Evaluation currently have the staffing and resources necessary to perform this function, or are additional resources be required?

CAPE currently has sufficient resources to conduct or review independent cost estimates for MDAP acquisition milestones and decision reviews. With the implementation of sustainment reviews, CAPE's current resources may become stretched. In addition, organizational changes to Navy's Service Cost Agency could place an additional burden on CAPE resources. If confirmed, I am committed to continually reviewing workforce requirements to meet CAPE responsibilities and, if necessary and appropriate, advocating for the resources CAPE requires to complete its core mission.

93. What is your view of the extent to which it would be appropriate to use Federally Funded Research and Development Centers or other contractors to assist in performing this function?

CAPE's organizational and analytical independence is critical to the process of developing sound, unbiased cost estimates. My view is that FFRDCs are generally more appropriate for specific analytic work such as a study on price escalation factors. And, of course, as a fundamental legal matter, any work an FFRDC performs must be within the scope of its contract and sponsoring agreement and under no circumstance can we contract for inherently governmental functions.

94. What actions would you expect to take, if confirmed, were you to determine that a cost estimate or cost analysis conducted by one of the Military Departments or Services or Defense Agencies in connection with a major defense acquisition program or major automated system program was *not* reasonable?

CAPE produces reports to document each statutory, independent cost estimate it produces for major defense acquisition programs. These reports provide detailed recommendations for the Service in terms of opportunities to mitigate cost and schedule risk. In the case of particularly egregious Service cost decisions, if confirmed, I would communicate these recommendations personally to the Service Acquisition Executive and review subsequent Program and Budget decisions to observe the Service's actions. I would not hesitate to elevate the issue to the Deputy Secretary or Secretary if I believed it was a vital issue for proper stewardship of taxpayer resources and/or national security.

95. If confirmed, would you recommend continuing the practice of calculating cost estimate "ranges" as opposed to setting specific cost estimates?

Yes, this practice should continue. It is important to employ the practice of presenting a range on a life-cycle cost estimate when it is appropriate. This may be necessary in the very early phases of programs (i.e., at Milestone A) when cost data may be of poor quality or very old; when the program may be poorly defined; or when there are large differences in assumptions that result in significant changes cost estimates.

96. Do you associate any negative repercussions with the requirement that program funding to be set at the higher of an independent cost estimate or the Military Department cost position?

Requiring program funding to be set at the higher of the independent cost estimate or the service cost position can have opportunity costs. While such a practice can in some cases reduce risk for a given program, it also reduces the amount of funds available to other procurement programs. This is a difficult tradeoff. That is why the decision of which cost estimate to adhere to at a given milestone is best left to the judgement of the acquisition executive on a case-by-case basis.

Analyses of Alternatives

Section 139a(d)(7) of title 10, U.S. Code, vests in the DCAPE responsibility for "[a]ssessments of alternative plans, programs, and policies with respect to the acquisition programs of the Department of Defense."

97. In your view, does DOD make appropriate use of analyses of alternatives in connection with major defense and middle tier acquisition programs?

The Department actively uses Analysis of Alternatives to make better informed acquisition decisions for major defense acquisition programs. Analysis of alternatives are not required for middle tier acquisition programs and the military services have generally opted not to conduct an analysis of alternatives to support middle tier programs. It may be appropriate to evaluate the record on middle tier acquisition programs, when data becomes available, to determine whether the use of analyses of alternatives for some middle tier programs is appropriate.

98. If confirmed, what changes would you make in the timing, content, or approach that DOD takes to analyses of alternatives in connection with such programs?

I would encourage the military services to conduct analysis of alternatives for any acquisition effort that has significant resource requirements. For major defense acquisition programs, I would encourage the military services to quantify and have metrics to message the capability gap that a system is supposed to mitigate. I would also encourage the military services to determine the effect of these systems on mission effectiveness.

Section 832 of the NDAA for FY 2020 directed changes to policy and procedures to improve the timeliness of analyses of alternatives.

99. What steps have been taken to implement these changes?

The Department created an Instruction to implement changes to improve the timeliness of analysis of alternatives. This instruction addresses common causes for delays in completing an analysis of alternatives to include not having proper metrics to measure capability gaps, not having funding available to execute an analysis of alternatives, and not having the proper security clearances or contracts in place to conduct an analysis of alternatives.

100. What is your view on the importance of such analyses in the context of the acquisition pathways that comprise the Department's recently issued Adaptive Acquisition Framework (AAF)?

Analysis of Alternatives are extremely important and should be actively used to ensure informed decisions. Without timely analytical underpinnings one can pursue a system to

solve a problem that has substantively changed and use defense dollars in a less efficient manner. If confirmed, I will work to ensure that Analyses of Alternatives are applied appropriately across the range of acquisition pathways.

Requirements and Resource Allocation

One of the challenges facing many acquisition programs—ranging from weapons systems to business systems—is unrealistic and unfeasible technical requirements.

101. What is your understanding of the role of the DCAPE in the requirements process?

CAPE is an advisor to the JROC process and engages regularly in the requirements process to work to ensure that requirements are both feasible and sufficient to close military gaps.

102. What best practices can the Department employ to generate realistic and feasible requirements, particularly in sophisticated, rapidly-evolving technical areas such as cybersecurity, hypersonics, and artificial intelligence?

Realistic and feasible requirements need to account for a variety of factors and assessments. If confirmed, I will work to ensure that requirements reflect the evolving nature of both the threat, realistic cost estimates and industrial considerations, and potential rapidly evolving technical areas.

The Department instituted Configuration Steering Boards to improve requirements stability by exercising control over any change to requirements that would increase program costs.

103. In your view, have Configuration Steering Boards generated the desired outcomes? How could the use and conduct of such boards be improved, in your opinion?

If confirmed, I look forward to learning more about CSB and considering what, if any, improvements there should be.

104. Looking across DOD's portfolio of acquisition programs, what are the most prevalent causes of cost growth?

The passage of WSARA in 2009 has drastically reduced the number of annual Nunn-McCurdy breaches. The annual average was 2.2 from 2010-2019, compared to 6.25 from 2006-2009. Recent cost growth issues tend to result from integration risk and manufacturing readiness that materialize as contractors return to building entire systems instead of the re-manufacturing efforts that had been more prevalent over the past two decades.

105. What should the Department do to correct these problems?

The Department has to continue to work with our major defense industrial base partners to manage schedules and throughput in order to realize cost efficiencies and minimize capacity risks. The Department also needs to continue to focus on requirements stability to avoid expensive contractual and manufacturing changes.

106. What role do you see for the DCAPE in controlling cost growth in the Department's major defense acquisition programs?

CAPE has the unique benefit of employing cost estimators and program analysts in the same organization. CAPE internally generates independent resource estimates for programs, then evaluate Services' programmed resources in accordance with those estimates. Even in cases when a program is not funded to the CAPE ICE, CAPE is still able to have estimate-informed discussions with program managers and PEOs throughout the PPBE cycle.

107. What steps can other key stakeholders—such as Program Managers and milestone decision authorities—take to better manage acquisition cost growth and improve program outcomes?

Program Managers and milestone decision authorities should rely, as much as possible, on data readily available in the DoD to inform program decisions. For example, if cost data doesn't demonstrate that a manufacturer's production costs have stabilized, it's probably worthwhile to delay a Full Rate Production decision until after the next cost data report.

108. Reflecting on your observations as recent acquisition reforms have begun to take root, do you believe DOD has improved its management of acquisition program costs (i.e., is there less cost growth than originally estimated)? If not, what additional changes are needed to reduce cost growth?

The passage of WSARA in 2009 has drastically reduced the number of annual Nunn-McCurdy breaches. The annual average was 2.2 from 2010-2019, compared to 6.25 from 2006-2009. Visibility and management of acquisition programs is improving due to unprecedented access to acquisition data. If confirmed, I will continue to refine our data collection methods and to explore the art of the possible in terms of data-driven acquisition decisions.

Many acquisition experts attribute the failure of DOD acquisition programs to a cultural bias that routinely produces overly optimistic cost and schedule estimates and unrealistic performance expectations.

109. What steps, if any, would you take, if confirmed, to ensure that the Department's cost, schedule and performance estimates are realistic?

I would continue to emphasize that the DoD needs to make data-driven decisions. If cost and schedule data for historical programs tell us that a planned schedule for a program is unlikely, I would advocate for the Service to program for additional resources to accommodate the potential schedule risk.

110. Do you perceive a need for additional processes or mechanisms to ensure that appropriate trade-offs are made between cost, schedule, and performance requirements early in the acquisition process? If so, what additional processes or mechanisms would you deem advisable?

CAPE is involved in the requirements process on MDAPs via Analyses of Alternatives. These studies provide a very early look at the cost, schedule, and performance trade space. With the size and importance of some of the current Middle Tier Acquisition programs (e.g., OMFV), the Department may need to look at appropriate processes to achieve similar trade space visibility while not imposing unnecessary oversight requirements.

111. In your view, would engagement between the DOD requirements, budget and acquisition communities earlier and more frequently throughout the process, help to promote more realistic cost, schedule and performance expectations?

Analyses of alternatives typically involve all three communities to some degree (requirements, budget, and acquisition), and these groups also converge to discuss acquisition programs during the annual Program and Budget Review. These events are critical to bringing disparate but equally critical viewpoints to bear on addressing acquisition program challenges and expectations.

112. If confirmed, what would you perceive to be the role of the DCAPE in facilitating such engagement?

CAPE facilitates AoAs and Program Review meetings. CAPE is responsible for making sure that each DoD stakeholder in an acquisition program has an opportunity to identify risks and opportunities in these forums.

113. What other steps would you recommend to increase requirements stability?

In many cases, requirements instability is based on ties and interfaces between programs, both from an integration and production capacity standpoint. If confirmed, I would work to emphasize and identify the potential effects of these interdependencies as early as possible in acquisition programs. This would provide program managers with the knowledge necessary to implement contracting contingencies and decision points

throughout the acquisition lifecycle to improve flexibility and prevent costly adjustments to a singular set of program requirements.

Given their enhanced roles and authorities vis-a-vis their respective Military Department acquisition processes, to what standard should the Military Service Chiefs be held for delivering acquisition programs on budget, on time, and to standard? Who should be held responsible for large-scale acquisition failures, in your opinion?

The Service leadership now control budgets, schedules, and acquisition strategies for all but a select few ACAT-ID programs, and should be responsible for the programmatic outcomes.

114. What role do you see for the DCAPE in ensuring that DOD does not permit a program to proceed from one stage of the acquisition cycle to the next until it has achieved the level of maturity required to reduce the risk of cost growth and schedule slippage?

If confirmed, I would foresee interacting directly with the Service Acquisition Executives to provide independent assessment of the risks and recommendations for mitigation, but the milestone decision is ultimately theirs to render. With that said, CAPE must staunchly defend the requirement to produce sound, unbiased cost estimates to inform these decisions and verify alignment of funding with estimated resource requirements in the PPBE process. If I believe a poor decision is being made that will harm the taxpayer and/or national security, I will not hesitate to raise that issue with the Deputy Secretary or Secretary.

115. Under what circumstances do you believe multi-year procurements should be used?

Multi-year procurements are appropriate when the conditions of 10 USC § 2306b are met.

116. What is your opinion on the level of cost savings that constitute "substantial savings" for purposes of the defense multi-year procurement statute, 10 U.S.C. 2306b?

Ultimately the decision whether savings are sufficient to support multiyear procurement belongs to the relevant acquisition official. The mechanism of achieving savings on an MYP contract varies depending on what is being procured. For a low volume/high dollar value programs like ships or subs, the value of savings achieved is very program and contract specific and, historically, has ranged from 4% to 20% but more typically been in the 4% to 7% range, while the dollar value has ranged from several hundred million to billions of dollars. The primary savings mechanism is the investment of Economic Order Quantity (EOQ) dollars for major component purchase by the prime. For other programs

(like missiles and aircraft), the savings mechanism can be more influenced by volume/rate effects.

117. What other steps, if any, would you recommend to increase the funding and stability of defense acquisition programs?

Industry feedback indicates that DoD could improve the stability/predictability of defense acquisition procurement profiles. Volatility within procurement lines drive uncertainty within industry and lead to cost growth. If confirmed, I would engage with the acquisition executives to stress the need for stable procurement profiles.

Acquisition Reform

Congress has enacted significant reform of the defense acquisition enterprise, to include establishing and expanding authorities related to special acquisition pathways and contracting flexibilities, including modifying the use of other transaction authority (OTA).

118. From your perspective, how have recent acquisition reforms and DOD's establishment of the Adaptive Acquisition Framework (AAF) affected the development and execution of DOD acquisition programs?

The use of these new acquisition processes holds the promise of quicker and lower cost acquisition efforts that would benefit the Department. If confirmed, I will work with these programs to implement cost reporting and remain engaged in assessing the feasibility of accelerated acquisition practices for different types of programs, and remain committed to updating our cost estimating process to reflect actual results.

119. What actions has the Office of Cost Assessment and Program Evaluation undertaken in support of acquisition enterprise reform, and to what effect?

CAPE has participated in a tri-chair MTA governance forum to assist in steering and oversight of Middle Tier Authorities for acquisition programs. In addition, CAPE has updated its DoDI 5000.73 and cost data collection guidance to align its processes with the relatively shorter time horizons associated with MTA program schedules. Finally, CAPE has adjusted its guidance on ICE preparation for MDAPs to align with Service acquisition processes. These changes have allowed CAPE to perform its statutory roles and requirements while remaining aligned with the spirit and intent of acquisition enterprise reform.

120. How would you assess and "score" DOD's competency and proficiency in matching budgetary mechanisms to different acquisition pathways? For instance, has DOD ever considered a budgetary mechanism other than the reprogramming process for intra-cycle new start programs undertaken under OTA or Section 804 authority?

As the Services pursue the myriad acquisition strategy options under the AAF, the resulting program successes and failures will identify areas where necessary requirement, budget, and testing policies need to be tailored in order to support the flexibility of the AAF. The Department has taken proactive steps to pre-emptively adapt many of its processes, but should anticipate further requirements for change as Services fully implement the AAF.

121. What reforms of the PPBE process should be undertaken, better to enable adaptive and streamlined acquisition approaches?

The PPBE process is agile and flexible enough to respond to the recent acquisition reforms once fully implemented. If confirmed, I will ensure CAPE helps to implement current reform efforts and will work closely with all partners in the Department to ensure the resource process is as efficient as possible and meets the needs of the Secretary and Deputy Secretary.

Much of the significant acquisition reform in which Congress and DOD have engaged in recent years is documented in the 2020 update to DOD Instruction 5000.02, *Operation of the Adaptive Acquisition Framework*. The Instruction lays out the different "acquisition pathways" comprising the AAF—each with its own policies and guidance. The Department's efforts to tailor acquisition approaches is resulting in more programs that are not categorized as "major defense acquisition programs." Consequently, these programs are not triggering the enhanced oversight mechanisms associated with major defense acquisition programs.

122. Do you have concerns about this relative lack of oversight? Please explain your answer.

The recent reforms move DoD away from a "one-size-fits-all" approach to acquisition, which was based almost entirely on investment thresholds. What we're seeing now is separation of programs, which would've previously been categorized as single ACAT I programs, into a series of Middle Tier or other acquisition pathway programs. The long run failure or success of these changes will ultimately depend on whether these tailored programs deliver the desired requirements and/or technical features on an abbreviated timeline. My sense is that it is too early to develop an overall assessment of the successes and failures of the new system. If confirmed, I will ensure that CAPE closely tracks performance in the new system and contributes to assessments of its success or failure.

123. What is your understanding of any new roles, responsibilities, and authorities DCAPE has under the AAF?

With the implementation of the AAF, DCAPE retains many of its previous roles, responsibilities, and authorities as they pertained to the traditional Major Defense Acquisition Program construct. The existence of multiple pathways under the AAF now also requires the DCAPE to advise USD(A&S) on the appropriateness and feasibility of

pathways relative to each other, and to consider cost, schedule, and performance trends within the context of the pathway selected. DCAPE must also ensure that the Department continues to receive adequate program data via Cost and Software Data Reports (CSDRs) and other mechanisms for all programs, even those using streamlined pathways with reduced administrative footprints.

124. The creation of the AAF requires DOD and the Military Departments to rethink how they identify and manage risk under each of the new acquisition pathways. What are your views as to how DOD should manage risk under the AAF and how do you plan to contribute to this effort, given DCAPE's statutory responsibility to issue guidance on how risk should be assessed in cost estimates?

The new acquisition pathways in the AAF come with new risks, e.g., ambitious schedules and the loosening the requirements definition process in certain pathways. However, the introduction of these potential risks could also allow programs greater flexibility in pursuing unanticipated technological opportunities as they arise, and recognizing challenges early so programs can pivot toward achievable goals. DoD should understand that such risks are inherent to these new pathways, and through experience refine criteria that align various programs to the pathway that optimizes potential risks and benefits. Cost estimators should analyze the sensitivity of their estimates to risk derived from traditional vectors as well as the pathway type selected, and present the range of potential outcomes to decision makers.

125. What role do you think the DCAPE should have in regard to acquisition programs that follow one of the pathways under the AAF?

DCAPE advises the USD(A&S) on schedule, resource allocation, affordability, systems analysis, cost estimation, and the performance implications of selecting particular acquisition pathways. DCAPE also oversees the collection of program data for all pathways to facilitate data-driven decision making. Particularly in the upcoming years in which the AAF will take full effect, DCAPE will compare the cost, schedule, and performance results of programs utilizing the various pathways to better inform decisions to manage risk and ensure program success.

126. Does the Office of Cost Assessment and Program Management have access to data and records and authority to provide independent costs estimates for Middle Tier Acquisition programs established under section 804 of the NDAA for FY 2016 and other alternative acquisition approaches?

CAPE is well positioned to support cost estimating and oversight of Section 804 programs. CAPE's recent update to DoDI 5000.73 updates CAPE's processes for data collection and cost assessment activities in support of Section 804 programs. CAPE is actively collecting data from Middle Tier Programs and preparing life-cycle cost estimates to inform Section 804 resource decisions.

127. Does DCAPE need additional authority to review and provide cost estimates or other analytic support for Middle Tier Acquisition programs or other alternative acquisition processes, in your view?

No, I believe DCAPE has sufficient authority to provide cost estimates and other analytic support for Middle Tier Acquisition programs and those in other acquisition pathways. CAPE may conduct, approve, or delegate cost estimates based on the pathway and likely cost per DoDI 5000.73.

128. Do you believe that the AAF and its constituent pathways can be effective in improving the performance of DOD's acquisition programs?

Yes. The AAF offers flexibility to the Services and program managers to deliver capability to the field. To the degree that the Services employ the AAF as designed and do not use it purely as a means to avoid oversight on risky programs, the flexibility of the AAF should improve program managers' ability to pursue and acquisition strategy uniquely suited to his or her requirements.

129. What steps if any do you believe are needed to ensure that the requirements process, budget process, and testing regime properly accommodate approaches under the AAF?

As the Services pursue the myriad acquisition strategy options under the AAF, the resulting program successes and failures will identify areas where necessary requirement, budget, and testing policies need to be tailored in order to support the flexibility of the AAF. CAPE recently experienced these growing pains with the advent of Section 804/MTA programs and updated its cost assessment policy (DoDI 5000.73) accordingly. The Department has taken proactive steps to pre-emptively adapt many of its processes, but the Department should anticipate further requirements for change as Services fully implement the AAF.

130. How should the Department ensure that each of the AAF pathways has an appropriate baseline against which to measure performance?

The adoption of baselines for each of the pathways should be reflective of the flexibility offered by the AAF. For example, the Middle Tier Rapid Prototyping pathway calls for development of prototypes on a 5-year timeline with residual operational capability at completion. Establishing a baseline for this type of program, based on future procurement quantities or lifecycle O&S costs, is unlikely to generate the type of risk-seeking, quick turn prototyping that the authority is intended to promote.

Software Acquisition

In the NDAA for FY 2018, Congress directed the Secretary of Defense to task the

Defense Innovation Board (DIB) "to undertake a study on streamlining software development and acquisition" In its May 3, 2019 report, Software is Never Done—Refactoring the Acquisition Code for Competitive Advantage, the Board noted that "getting software right in the Department requires more than changing development practices; oversight (and budgeting and finance) must also change." Among other things, the Board recommended the creation of new acquisition pathways for software that prioritize continuous integration and delivery of working software, in a secure manner, with continuous oversight from automated analytics. The DIB envisioned the DCAPE, among other senior DOD officials, as playing a significant role in making such a process successful.

131. What are your views on the DIB report and the role the DIB would recommend for the DCAPE in assessing major software acquisition programs?

The DIB report correctly documents there are new and evolving measures for software development that are part of modern software development paradigms. And while acknowledging these new paradigms, the Department and the larger industrial base have been using well proven measures for not only costing but also in the management of software development for decades. If confirmed, I would encourage CAPE to continue to be actively engaged with industry in studying these paradigms to ascertain their viability to augment software measures.

132. What are your views on the feasibility, advisability, and suitability of implementing such a new acquisition pathway for software?

The new acquisition pathway for software should enable rapid iteration and adjustment of software to release new capabilities to the warfighter, avoiding the risk of producing code that is already obsolete by the time it is released. However, the acquisition community must be careful to avoid releasing software too quickly, before it can be sufficiently tested and taught to users, for applications in which the risk of failure is unacceptable. For example, iterative releases in the software acquisition pathway may be appropriate for an application that does administrative tasks, and inappropriate for critical flight operations software, failures of which could present an unacceptable risk to the safety and lives of pilots and others.

133. How do you believe industry "best practices" for cost estimation and analysis and program evaluation could best applied to meet DOD software acquisition requirements?

The Department already has a proven method for data collection through the SRDR process that is widely adopted by industry. If confirmed, I will ensure CAPE remains open to new approaches and works with stakeholders to examine new concepts in partnership with industry.

134. What further studies and assessments do you believe necessary to support changes in DOD policies and processes for software acquisition?

If confirmed, I will review current studies and identify if additional assessments or studies are required.

Section 800 of the NDAA for FY 2020, pertaining to the Department's interim software policy, noted that cost estimation and assessment and program evaluation methods are critical to well-informed program oversight, and that, for software initiatives, such approaches remain nascent. The conference report directed the DCAPE, in coordination with 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 NDAA for FY 2018, and sections 215 and 869 of the NDAA for FY 2019, in the development of guidance and oversight procedures for managing, estimating, and assessing software acquisition programs.

135. What steps has the Office of Cost Assessment and Program Evaluation undertaken to date to implement the FY 2020 NDAA mandate?

CAPE continues to collect new sources of data to determine meaningful, informative cost estimating relationships.

136. If confirmed, what further actions would you take to implement Congressional direction, and on what timeline?

If confirmed, I will work to ensure CAPE cost estimates are produced as early as meaningful to inform the milestone decision authority decision making. Practically speaking, software programs present no basis for different treatment from other programs. If confirmed, I would work with the acquisition community to develop a process to permit meaningful and timely cost input into decision making.

Program Evaluation

Section 139a(d)(5) of title 10, U.S. Code, makes the DCAPE responsible for "[r]eview, analysis, and evaluation of programs for executing approved strategies and policies, ensuring that information on programs is presented accurately and completely"

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

Independent analyses and evaluation of programs help identify underlying risk in programs. Specifically, in its cost role CAPE helps identify cost, schedule or performance risk and in its program analysis role CAPE examines mission need and mission

performance. CAPE helps Department leadership make informed decisions for acquiring and resourcing program plans.

138. What changes or improvements to the organization, process, or methodology used by DOD for such reviews, analyses, and evaluations are necessary and appropriate, in your view? Please explain your answer.

I am not aware of the need to make any changes or improvements to the process or methodology at this time. If confirmed, I will review the process and methodology and make recommendations for improvements, as appropriate.

<u>Joint Requirements Oversight Council (JROC) and the Joint Capabilities Integration and Development Systems (JCIDS)</u>

In accordance with section 181 of title 10, U.S. Code, the DCAPE serves as an advisor to the JROC.

139. In your view, what is the mission of the JROC and what role should the DCAPE play in the execution of that mission?

The mission of the JROC is to give operators a strong voice in establishing requirements. CAPE participates at all levels of the JROC/JCIDS process providing independent analytic input.

140. How would you assess the effectiveness of the JROC in establishing joint requirements for submission to the DOD acquisition process?

The JROC/JCIDS process has historically been viewed as slow and bureaucratic. My understanding is that the VCJCS is actively working to improve the process and, if confirmed, I would work closely with him to assist in these reforms and improve the effectiveness of requirements determination.

141. Would you see benefit, if confirmed, in DOD undertaking more joint acquisition programs, such as the Joint Light Tactical Vehicle and Future Vertical Lift?

Joint acquisition programs can be important and useful, but I believe that jointness "upstream" of the establishment of a program office can be more important. Through reestablishing the future force development and design process, a goal is to identify common solutions to problems across components.

142. If confirmed, how would you assist the JROC in more effectively identifying where opportunities for multi-Service collaboration exist, or where programs could or should be modified to take advantage of a related acquisition program?

If confirmed, I will work closely with the Joint Staff and the Military Departments to ensure operational need and technical feasibility are rigorously examined.

143. If confirmed, what role would you seek to have in ensuring that joint acquisition priorities are given full and fair consideration in Military Department and Service budget processes?

If confirmed, I will partner with the Joint Staff in reforming the JROC. Additionally, I will work with the Under Secretary for Policy to ensure joint acquisition priorities are appropriately emphasized in the Defense Planning Guidance and ensure that DPG guidance is enforce in the Program Review process. Finally, I will continue the strong relationship CAPE has with Service counterpart offices to facilitate dialogue on key priorities to ensure these priorities receive a full and fair assessment in their internal processes.

144. Is the JCIDS process effective in providing the information the JROC requires to anticipate both the current and the future needs of the joint force?

The biggest challenge I am aware of is the lack of "upstream" information from the future force development and design process. DoD is in the process of rebuilding this process and it is through this process that mission gaps and needs for a future warfight are derived.

145. Do you have any recommendations for changes to the structure, authority, or processes of the JROC or the JCIDS?

If confirmed, I will support the Joint Staff's effort to reform their requirements process and forums.

Manufacturing and Industrial Base Issues

146. Should the Office of Cost Assessment and Program Evaluation dedicate greater resources to assessing auxiliary or logistical capabilities and concepts (e.g., defense industrial base capacity, supply chain security, flow of forces capabilities)?

CAPE currently assesses auxiliary and logistical capabilities through its development of independent cost estimates and corresponding evaluation of defense industrial base capacity.

147. How would you assess the effectiveness of DOD efforts to expand industrial base capacity through the Defense Production Act, Manufacturing Technology program, and other such activities?

I am not yet familiar with these efforts. If confirmed, I would be happy to become familiar with them as necessary for the execution of duties as DCAPE.

148. How will you assess DOD's dependence on foreign sources of technologies and materials, such as electronics and rare earth materials, as you analyze costs and evaluate program effectiveness and likelihood of success?

I am not yet familiar with these efforts. If confirmed, I would be happy to become familiar with them as necessary for the execution of duties as DCAPE.

149. What additional capabilities are needed for the Office of Cost Assessment and Program Evaluation to better evaluate the relative merits of proposed industrial base expansion activities and the value of specific industrial policy activities?

CAPE will continue to partner with USD(A&S) on industrial base issues and provide analytic insight based on evaluation of current and historical defense program and contractor trends.

Science and Technology

Office of Cost Assessment and Program Evaluation assessments most commonly focus on the headline platforms that constitute the "bulk" of U.S. force structure, notwithstanding that industrial capacity and logistics have historically been substantial determinants of success in past military conflict and that emerging technologies may prove decisive in future conflicts.

150. 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 will review the priorities of the office and determine the need for reallocation of extremely limited and valuable resources, to include manpower. CAPE recently underwent a restructure that established a Capability Enablers organization. Some of the planned growth in CAPE personnel will be allocated toward these mission.

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

The Department as a whole is working to improve data and modeling approaches for key enabling functions. CAPE currently conducts assessments of new technological approaches. If confirmed, I will examine whether new approaches, metrics, or personnel are required to ensure that these areas receive full and accurate assessments.

152. 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 will actively work to build a workforce that is capable of assessing new technologies and their potential impacts on future operations. Maintaining a highly talented workforce is critical to executing CAPE's role as an independent advisor.

153. Given the inherent lack of data and uncertain quality of pre-prototype emerging technologies, how can CAPE better evaluate the relative merits of such technologies and their utility in future programs, operational concepts, and force structure?

For pre-prototype technologies, CAPE would assess the outcomes of these activities to determine the likelihood and timelines to deliver operational warfighting capabilities. These assessments would inform new operational concepts and future force structure.

154. How do CAPE's analyses germane to emerging technologies rely on and differ from those of the Under Secretary of Defense for Research & Engineering (USD(R&E)) and the broader Science & Technology (S&T) community?

CAPE controls no resources in the R&D and S&T community and provides unbiased assessments that cannot be delivered by stakeholders, resource sponsor, and advocates. This fundamentally differentiates CAPE analyses from those elsewhere in the Department.

The Office of Cost Assessment and Program Evaluation has on occasion been criticized for routinely advancing relatively immature technological solutions to pressing organizational, operational, and tactical problems.

155. Do you believe that such a bias exists in the Office of Cost Assessment and Program Evaluation?

CAPE's core mission is to provide unbiased assessments. In my own experience, I have not seen such a bias.

156. Given the returns of S&T spending and the future obsolescence of current-generation systems under procurement, how much should DOD spend on S&T and other forms of research and development, as compared to procurement, in your view?

One view is that S&T spending should be slightly countercyclical to the budget cycle. When the procurement budget is high, the Department can rely on those solid investments while funding innovative basic and applied research for future capabilities. When procurement budgets are lower as new defense programs begin, S&T technology development investments can increase to support the new capabilities.

157. How does the Office of Cost Assessment and Program Evaluation model such problems that are highly dependent on assumed discount rates and assumptions about future strategic environments?

CAPE employs a number of analytic techniques in order to properly assess the vast array of problems facing the Department of Defense. Any quality assessment needs to match the analytic approach to the problem set and perform robust sensitivity analysis on a ranges of factors and assumptions.

158. How would you assess the effectiveness of the Small Business Innovation Research and Small Business Technology Transfer programs in supporting defense modernization efforts?

I have not personally evaluated those programs. If confirmed, I would be happy to become familiar with them as necessary for the execution of duties as DCAPE.

159. How has CAPE engaged with the USD(R&E) and the Military Departments for information and resources to support Congressionally-mandated reviews of DOD Laboratory infrastructure, modernization, and workforce? What progress has been made in executing these mandates? If confirmed, what actions would you take to contribute to the completion of this study in a timely fashion?

CAPE regularly engages with USD(R&E) and the Military Departments in data calls and engagements in support of Congressionally-mandated reviews of DOD Laboratory infrastructure, modernization, and workforce. Our analysts will form collaborative teams with USD(R&E) and the Military Departments to complete the Congressionally-mandated reviews on time.

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.

160. What is your understanding of the RMMV program?

RMMV was a component of the LCS Mine Countermeasure Mission Module that was eventually cancelled due to a lack of performance.

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

DOD should rigorously assess under-performing programs to determine the cost-benefit for continued progression vs. cancellation. The Department should not be afraid to fail a

little in order to learn fast and advance fast but should be willing to cancel programs. Our adversaries are pushing the boundaries of advanced technology and we must also.

162. 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.

Yes, prototyping subsystems is a key component to successful acquisition. The Navy's plan for these ships to be lightly/optionally manned may help to alleviate some technological concerns. However, this program, as with others, will receive a critical assessment as part of the Program Budget Review process to ensure it is executable and an appropriate use of taxpayer dollars.

The committee understands that, based primarily on an Office of Cost Assessment and Program Evaluation-led analysis, the Navy's FY 2020 budget request included procurement of 10 Large Unmanned Surface Vessels (LUSVs) in the 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) LUSVs, intended to provide risk reduction for the Navy LUSV program, have demonstrated just 2 to 3 days 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 LUSV lessons learned will have limited applicability to the Navy LUSV program.

163. How should Office of Cost Assessment and Program Evaluation analysis and recommendations inform budget requests regarding new capabilities that do not exist?

To maintain maritime dominance and freedom of maneuver, diversified strike options are needed. My understanding in the case of LUSV is that, when the Navy developed and proposed the program, a joint CAPE and Navy team spent months assessing the need for such a vessel and then what value it could provide under a variety of future threat environments. This analysis found LUSV to be a critical enabler for increasing the distribution, lethality, and survivability of the Naval force. LUSV has a large role to play in this future. As the program matures, CAPE will continue to have a role assessing this acquisition approach and any inherent technological and budgetary risk as part of the Program Budget Review process.

164. 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 key technologies and robust R&D funding is a crucial component to successful programs

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

This is one of many items we can address as part of the annual Program Budget Review cycle.

166. If confirmed, how would you approach the task of ensuring that any Office of Cost Assessment and Program Evaluation 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?

As a general rule, CAPE provides a range of options based on stakeholder feedback and underpinned with analysis. Technology maturity is one of the key factors employed during these program deliberations. CAPE will work with Services to ensure that promising technologies had 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 process or the annual Program Review.

167. When the Office of Cost Assessment and Program Evaluation 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?

This type of assessment can be accomplished through Analyses of Alternatives, requirements documents, and subsequent work conducted by relevant program offices. CAPE plays a role in the AoA process, as well as providing expertise through the JCIDS process

168. What do you envision as the most effective relationship between the DCAPE 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 Office of Cost Assessment and Program Evaluation recommendations on concept development, new acquisitions (e.g., LUSVs), or changes to existing acquisitions?

Technology readiness assessments and other engineering-based knowledge should be generated as part of the acquisition process and vetted and assessed both during the annual Program Review and acquisition milestones. CAPE ideally would be able to utilize rigorous R&E assessments and technical expertise in both studies completed on a range of strategic issues throughout the year and during the Program Review process.

169. If confirmed, what changes to the DCAPE-USD(R&E) relationship or other DCAPE relationships would you consider to improve the technical foundation of concept development, new acquisitions, or changes to existing acquisitions recommended by the Office of Cost Assessment and Program Evaluation?

At this time, I do not see the need for specific changes but, if confirmed, I will work with USD(R&E) to ensure a robust dialogue on concept development, new programs, or changes to legacy programs.

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

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

I believe having a Senior Technical Authority for each class of naval vessels is an important step in ensuring timely production of future vessels.

171. 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 Office of Cost Assessment and Program Evaluation analysis of the technical aspects of naval vessels?

If confirmed, I would work with my Navy counterparts to ensure linkages between the Senior Technical Authorities and my staff and ensure CAPE has all relevant information for any program that is part of our assessments.

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.

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

CAPE's approach is to provide the Secretary and Deputy Secretary with a range of options that allow them to balance capability and risk both within a given mission area (like cyber) and between mission areas (e.g., trading off between different types of kinetic and non-kinetic capabilities). In order to provide those kinds of options CAPE assesses mission areas in the context of larger joint concepts, rather than in isolation.

173. 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? If the office

does not currently have a role in these types of assessments, should it? In your view, does the office have the relevant expertise and technical capability to execute such assessments?

My understanding is that CAPE does support these efforts on occasion when there is a particular need for CAPE expertise, but that CAPE does not regularly participate. If confirmed, I would be happy to learn more about these processes and assess whether a more active CAPE role would be valuable.

Intelligence

174. If confirmed, how would you structure your relationship with the Under Secretary of Defense for Intelligence & Security, particularly as regards assessments of special access and compartmented intelligence programs?

CAPE has historically had a strong collaborative relationship with the Office of the Under Secretary of Defense for Intelligence & Security, for both program review and deeper analysis of relevant programs. We have shared information on assessments of military intelligence programs, to include special access and compartmented intelligence programs. If confirmed, I would seek to continue this collaborative relationship with the Under Secretary of Defense for Intelligence & Security. In particular, I would continue the shared analysis of military intelligence programs to support DoD missions and identify the highest payoff programs with the greatest benefit-to-cost ratios.

175. On what other types of projects would you expect to coordinate and collaborate with the Under Secretary of Defense for Intelligence & Security?

CAPE routinely works closely with USD (I&S) on a wide range of topics, e.g., prioritizing intelligence investments across the intelligence agencies. If confirmed, I plan to continue and build on that relationship.

Military Health System Reform

Beginning in the NDAA for FY 2017, Congress enacted numerous laws to transform the military health system (MHS) into a more efficient, unified system of healthcare delivery across both its direct and purchased care components. These laws require the Defense Health Agency to administer and manage military treatment facilities (MTFs) and the medical components of the Military Departments to focus solely on improving the health readiness of the Total Force and the clinical readiness of their medical forces.

176. Do you support the MHS transformation prescribed by Congress?

Yes. I provided analytic support for the development of the FY17 NDAA reforms through my involvement with the Military Compensation and Retirement Modernization

Commission, my testimony to SASC in 2016 on MHS reform, and various research reports that were cited in reform development.

There is only one area that I am aware of that the Administration has requested an adjustment to the Congressional reforms. The FY17 NDAA provided a clear vision of consolidating peacetime healthcare delivery and MTFs with DHA and having the military medical departments focus on their readiness mission. The FY19 NDAA adjusted this vision by directing the transfer or studying the transfer of some readiness functions from the Services to DHA (e.g., R&D and training). The Administration submitted a legislative change proposal with PB21 requesting that readiness R&D remain with the Services because transferring it to DHA would recreate one of the same underlying problems that the Congressionally directed reforms were intended to solve (assigning beneficiary care and readiness responsibilities to the same official creates a tension where they have to prioritize their focus on one over the other). I support the Administration's legislative change proposal and believe this is an area of the Congressionally directed reform that could be improved.

177. Do you believe that MHS transformation has been too slow? Why or why not?

The FY 2017 NDAA's mandated multiple reforms to the military healthcare system have not yet been fully realized. I believe that these reforms should be realized as quickly as possible.

178. If confirmed as DCAPE, what role could you play in more rapidly advancing the goals and objectives of MHS transformation?

If confirmed, I would continue to provide analytic support to the Secretary and Deputy Secretary of Defense to help guide the reform process.

179. In your view, what more should be done to make the MHS more effective and efficient?

I have publicly testified to the SASC and written in numerous public research reports that important areas of improvement in the MHS include readiness of the military medical force (ensuring the medical force is ready for a near peer war fight) and TRICARE contract reform (adopting civilian best practices in healthcare contracting to improve access, choice, and networks for beneficiaries while controlling cost). If confirmed, I would work closely with the DoD leadership and the SASC to understand the extent to which these problems remain important issues and, if additional reforms are needed, to recommend potential changes.

180. Do you believe that the Department should purchase more healthcare services in the private sector rather than deliver them in MTFs? Please explain your answer.

I have publicly testified to the SASC and written in numerous public research reports that the MTFs are a vital tool for maintaining the readiness of the military medical force, that some MTFs excel in this mission by providing relevant case mix for clinical skill maintenance (e.g., San Antonio), and that some MTFs do not excel in this mission. I have cited in my testimony research that has found MTF costs exceed private sector healthcare costs and that some MTFs do not operate at the case volumes that are considered prudent in the civilian sector. The conclusion of that testimony and research has been that MTFs succeeding in their mission should be invested in and MTFs not succeeding in their mission should be reformed, which can include modifying the operations of the MTF (e.g., public-private partnerships) or closing it. This is consistent with the direction in section 703 of the FY17 NDAA and the Administration's approach to MTF reforms submitted with PB21.

181. Were more beneficiary care to be provided in the private sector, how would you propose that military providers maintain their proficiency—given that they would be caring primarily for younger, military personnel?

I have publicly testified to the SASC and written in numerous public research reports that some MTFs provide robust workload for maintaining the clinical currency of the military medical force and some do not. Reforming MTFs that do currently deliver required workload for clinical currency would potentially increase the readiness of the force by freeing those military providers to move to clinical settings with the amount and type of workload required for readiness.

In the President's budget request, DOD assumed about \$33 million in savings from realignment or restructuring certain MTFs. But successful MTF realignment requires provider network adequacy (capability and capacity) near MTFs. As to certain of those MTFs designated to realign or restructure their services, DOD has acknowledged that local provider networks are not now and may never be able to accept additional TRICARE beneficiaries.

182. In your view, what prompted DOD to assume savings for this initiative in the absence of concrete plans to realign or restructure MTFs and without assurances that provider networks could accept additional TRICARE beneficiaries?

Realigning and restructuring MTFs to provide better care, choice, and access to beneficiaries and become more efficient is an important DoD goal mandated by Congress in section 703 of the FY17 NDAA. If confirmed, I could review the DoD's analysis of network capacity as warranted.

DOD Business Reform

Reforming the Department's business practices for greater performance and affordability is the third pillar of the 2018 NDS. The Reform Management Group (RMG) was established in 2017 as a governance body to manage and oversee reform efforts

through nine lines of business. In February of 2018, senior DOD officials projected that the reform of defense business operations would save \$46 billion over four years—savings that would be reinvested in enhancing the readiness and lethality of the force. In its *FY 2020 Annual Performance Plan and FY 2018 Annual Performance Report*, DOD asserted that it had "saved \$4.702 billion through reform efforts in FYs 2017 and 2018 combined, and [was] on track to save more than \$6 billion through new and continuing efforts in FY 2019."

183. How was the DCAPE involved in the RMG process?

While not directly involved in the RMG, it is my understanding that all proposals that have resource impacts are reviewed during the PPBE process and therefore CAPE has some visibility.

184. How has DCAPE been involved baselining all costs associated with executing the civilian resources management, logistics management, services contracting, and real estate management functions across the DOD, as required by the NDAA for FY 2019?

To my knowledge, Comptroller and CAPE provided subject matter experts to support the Chief Management Office to establish baseline data sets.

185. In your view, what role should the DCAPE play in assessing and evaluating the effectiveness and cost savings generated by business, management, and organizational reforms in DOD?

In my view, CAPE has a vital role to play in DoD reform efforts. As an independent advisor, CAPE can take an objective analytic look to ensure reform efforts create tangible efficiencies.

186. If confirmed, how would you structure your relationship with the DOD Chief Management Officer (CMO), particularly with regard to the planning and control of investments in defense business systems? How would you determine on which business capability acquisitions DCAPE will conduct a cost estimate? On what other projects would you expect to collaborate with the CMO?

If confirmed, I will work closely with the CMO to identify on which systems CAPE will conduct a cost estimate. CAPE and CMO already closely collaborate and I would plan to continue that relationship, if confirmed.

DOD Workforce

In lieu of the "Workforce Reduction Plan" required of all federal agencies by Office of Management and Budget memorandum M-17-22, Comprehensive Plan for Reforming the

Federal Government and Reducing the Federal Civilian Workforce, in September 2017, DOD submitted a "DOD Workforce Rationalization Plan."

187. What progress have DOD Components made in implementing the DOD Workforce Rationalization Plan?

I do not have direct knowledge of this issue, but my understanding is that the Department is making progress in how it manages its workforce, assess qualifications, outlines the right structure, and reduces unnecessary costs. If confirmed, I will work to gain a better understanding of this issue and monitor the progress to ensure the Department is operating as efficiently as possible.

188. In your view, how could broader implementation of the Workforce Rationalization Plan generate savings and/or render the Department more efficient and productive?

In my view, continuing the Secretary's Defense-wide initiatives will help explore areas of inefficiencies and utilize various workplace tools to enhance productivity.

189. If confirmed, are there particular elements of the Plan on which you would recommend the Secretary of Defense focus implementation going forward?

If confirmed, I will carefully study the plan and make recommendations to the Secretary as warranted.

190. What barriers do you perceive to widespread implementation of the Plan and what steps would you take to mitigate them, if confirmed?

In my experience, resistance to change and the inability to use appropriate workforce shaping tools can be common barriers. If confirmed, I would work with OSD P&R and key leaders within the Department to identify the workforce the Department needs for the 21st century.

191. What role does the DCAPE play in developing and ensuring appropriate use of business rules for estimating and comparing the costs of different configurations of manpower, including DOD civilian and military personnel and contract support?

The Director of CAPE plays a role in the business rules for estimating and comparing the costs of manpower by overseeing the Full Cost of Manpower (FCOM) tool. FCoM is a cost analysis tool designed to provide a consistent method of computing personnel compensation based on guidance and input from Personnel and Readiness and the Comptroller.

In FY 2017, DOD obligated more money on federal contracts (\$320 billion in current dollars) than all other government agencies combined. Services accounted for 41% of total DOD contract obligations, goods for 51%, and research and development for 8%.

192. Section 817 of the NDAA for FY 2020 directed that DCAPE have a role in assessing the basis for DOD's use of services contracts, and to help improve data collection and analysis on the costs of such contracts. In your opinion, what role should DCAPE play in this undertaking, and if confirmed, what steps would you take to address this challenge?

CAPE needs to work closely with organizations such as A&S, Comptroller, CMO, and the Military Departments, to conduct any assessment. CAPE's goal should be to identify actions needed to improve the quality of both the data used and the analyses conducted regarding service contracts.

193. In your view, what tack should DOD take to replace the outmoded, estimate-based process for generating the annual Inventory of Contracted Services with a data-driven tool for reporting, analysis and oversight of the Department's spending on contracts for services?

If confirmed, I will assess the state of the current process and provide recommendations for improvement.

It is not uncommon for contractor employees—particularly those contracted to provide knowledge-based or administrative services—to work in the same offices, serve on the same projects and task forces, and perform many of the same functions as DOD employees.

194. Are you confident that the Department has in place adequate processes to ensure that contractor employees do not perform inherently governmental functions and that contractor performance of critical government functions is minimized?

The law provides that only government employees fulfill inherently governmental functions and I will work to ensure that contractor performance of functions closely associated with inherently government functions is minimized. I know from experience that this is taken very seriously in the PPBE process.

On June 20, 2019, DOD submitted its report certifying the average percentage of appropriations expended on certain Management Headquarters Activities (MHA) across the Department.

195. In your view, by what process or formula should DOD and Congress ascertain or prescribe the appropriate percentage of the budget to be expended on MHA going forward? Please explain your answer.

I recognize the need to prioritize resources for the Department's combat missions. However, strict formula-based guidelines for allocating Management Headquarters Activities resources are generally problematic because they restrict the Department's ability to respond to changing circumstances and evolving roles and missions. If the Department were allowed to focus on achieving MHA goals rather than on complying with MHA ceilings, the Department would have sufficient flexibility to meet requirements.

196. In your view, is there utility in further reductions to the budgets and manning of Department of Defense MHA as a means of promoting the efficiency of DOD operations?

There is always utility in continuing to scrutinize functions of all DoD elements (including headquarters) in order to ensure that their budgets and manning are right-sized to the components' missions. Specific directed reductions without accompanying reductions in requirements or missions can create unintended results. Establishing broad guidelines would be preferable to specific reductions.

197. If confirmed, what specific recommendations would you provide the Secretary of Defense with a view to reducing the size and scope of the defense-wide and headquarters accounts and maximizing the availability of resources for the fielding of combat power?

Over the past year the Department has worked successfully to reduce the size of Defense-wide accounts to free up more resources for fielding Combat Power. I've been working closely with Department leadership to identify additional savings or opportunities to transfer funds to the Services. Defense-wide components should continue to be scrutinized for opportunities to optimize their operations to focus as much as possible on core competencies that provide the most efficient use of resources for the best outcome for the entire Department of Defense. If confirmed, I plan to continue to seek options to free up resources from the defense-wide account for reinvestment in the Department's modernization and readiness accounts.

Financial Management and Auditability

Although audit-readiness has been a goal of the Department for decades, DOD has repeatedly failed to meet numerous congressionally-directed audit readiness deadlines. DOD and the Military Departments remain unable to achieve a clean financial statement audit and DOD remains on the Government Accountability Office's list of high risk agencies and management systems for financial management and weapons systems acquisition.

198. What impediments hinder the Department's ability to achieve a clean audit and how would you lead the Office of Cost Assessment and Program Evaluation in helping DOD to resolve these impediments, if confirmed?

The quality of data, safety and security of IT systems, and diversity in business processes are potential impediments to achieving a clean audit. CAPE can play a role in implementing and enforcing better quality data to support an audit, but it will take a collaborative effort across the Department to be fully successful.

199. How could initiatives by the Office of Cost Assessment and Program Evaluation to improve data collection and analysis contribute to the success of broader efforts to improve financial management in DOD, in your view?

By improving availability and transparency of data, CAPE can ensure all relevant stakeholders are aware of key facts and able to assess long term costs and performance of programs from a common, consistent, agreed-upon basis.

200. Focusing on cost assessment and program evaluation, what benefits would accrue to DOD once it achieves and maintains a clean financial statement?

Anything that helps to improve data quality and reliability helps CAPE do its job. For example, improvements in the quality of operating and sustainment realized costs would be beneficial to CAPE.

201. How, if at all, would improving internal controls and achieving a clean audit improve DOD's ability to estimate more accurately the costs of development, procurement, and sustainment of weapons systems and to control acquisition costs? Please explain your answer.

I would expect that a clean audit would enhance the Department's ability to understand costs across the acquisition life cycle. This would provide better data to understand program performance, costs, and schedules.

202. What is the merit of asset valuation to the Department of Defense, in your view?

Asset valuation requires complete, standardized data structures for DoD assets and the integration of property and financial data. Having complete, standardized, accurate, and integrated data would allow DoD to conduct a range of analyses on its assets. For example, these data would allow the Army to analyze the aging of its legacy key platforms (e.g., Abrams, Apache, Blackhawk, etc.) over time to compare the age/value of the asset profile and help optimize recapitalization and modernization.

Some commentators have asserted that efforts to achieve a clean audit opinion on DOD financial statements may be "a road to nowhere". Unlike clean and accurate

private sector balance sheets and income statements, which are used to demonstrate the value of a business to outside investors and creditors, there is no similarly "good use" for a DOD financial statement, regardless of whether it is auditable.

203. Do you agree with this statement—in whole or in part? Please explain your answer.

I am very familiar with this comment and although I very much appreciate this point of view, I disagree with this conclusion. My experience at the Army was that much of what a successful audit requires is sound, accurate, and verifiable data; safe and secure IT systems; and efficient and enforced business processes. I believe all of these are areas of needed improvement in DoD and that the audit is the best enforcement mechanism to achieve them. I understand that one concern with the audit is that it has been used as justification for expensive investments specific to auditability that have not led to actual improvements in the fundamentals (data, IT systems, and business processes). I agree that we must constantly be on guard to prevent this from happening, auditability investments should be focused on fundamentals that improve DoD performance. I would also support, if appropriate and needed, limited, targeted adjustments to audit standards in places where the civilian standard may not be appropriate or useful for government purposes, but I would not recommend changes to the process of independent, external auditors examining DoD data, IT systems, and business processes.

Personnel Costs

Military personnel costs continue to grow rapidly and consume an increasing share of the DOD budget. A large portion of the military compensation package consists of in-kind benefits—health care, housing, tax-free shopping in military exchanges, taxpayer subsidized commissaries—that complement competitive salaries and a generous military retirement benefit.

204. In your view, are military personnel costs excessive?

Military personnel are the most important asset in the Department. There are two key variables in personnel costs: the cost per person of providing military compensation; and the valuation of the compensation package by Service members. DoD must provide a highly valued compensation package to Service members to recruit and retain the force it needs for the NDS. If the cost of delivering the compensation package is significantly higher than the value of that compensation package to Service members, then compensation should be reformed to eliminate this waste of taxpayer resources.

205. In your view, are military personnel cost increases sustainable?

Military personnel cost can be sustainable if proper reform efforts are undertaken.

206. How could military personnel costs be decreased, in your view, without adversely affecting the effectiveness of the force?

Military personnel costs could be decreased while increasing the valuation of the compensation package for most service members by shifting more resources into cash salary and away from in-kind benefits.

207. Should the Department's personnel costs grow at the rate of inflation?

Personnel costs have to be balanced across many factors to include the impact of private sector wages, talent management across the force, and the need for critical skill sets. Hence, locking the rate of growth would limit the Department's flexibility to recruit and retain high-demand skill sets.

208. In your view, is it feasible for the topline defense budget to adjust annually to match the growth in personnel compensation and in-kind benefit costs?

Topline defense budgets should take into account a number of factors to include personnel costs, the strategic environment, Administration and Congressional priorities, as well as a number of other factors.

Base Realignment and Closure (BRAC)

The 2018 NDS provided that the "Department [would . . .] work to reduce excess property and infrastructure, providing Congress with options for a Base Realignment and Closure."

209. Do you believe another BRAC round is needed? Please explain your answer.

If confirmed, I would work closely with the relevant stakeholders to identify if there is a need for an additional BRAC round.

210. In your view, how could the Department structure a future BRAC round with a view to enhancing NDS implementation?

If confirmed, I would seek to better understand the pros and cons of past BRACs, and any specific lessons learned. Any efficiencies realized from a BRAC round would likely be redistributed to enhance NDS implementation. CAPE could work with A&S to ensure that future BRAC rounds have realistic cost savings assumptions.

211. The 2005 BRAC round resulted in significant unanticipated implementation costs and saved far less than originally estimated.

212. What is your understanding of why such cost growth and lower realized savings occurred?

If confirmed, I would review this issue as necessary for the execution of duties as DCAPE.

213. How could such issues be anticipated and addressed in a future BRAC round, in your view?

If confirmed, I would seek out the lessons learned from previous BRAC rounds and apply that knowledge toward any possible future BRAC rounds.

Command Climate Survey

214. In the context of your service performing the duties of the DCAPE, did you administered a command climate survey to the workforce under your leadership and management? If so, what were the results of that survey and what actions did you take or direct to address the survey results?

No, CAPE did not administer an official command climate survey during my time as Performing the Duties of the Director of CAPE.

215. If you have not administered such a survey, would you plan to do so, if confirmed? Please explain your answer.

If confirmed I will leverage the national viewpoint survey results as they apply to CAPE. If additional information is needed beyond the national viewpoint survey, I am open to administering a separate survey.

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.

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

During my time Performing the Duties of the Director of CAPE, I have assessed the climate of the CAPE workforce to be very professional and respectful of one another and not indicative of any known issues involving sexual harassment or gender discrimination.

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

If I were to be confirmed as the Director of CAPE, the action I would take upon receiving or becoming aware of a sexual harassment or discrimination complaint is to immediately conduct an independent inquiry into the matter, in coordination with the HR and EEO office. I would take these matters seriously, enforce accountability, leverage opportunities to train and educate leaders and the staff, and reiterate my stance against inappropriate behavior that has no place in the workplace or anywhere else. I would also ensure CAPE has workplace policies and practices that promote respect, civility, and inclusion for all.

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.

218. 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 yes or no.

Yes; in accordance with applicable laws and long-standing Department and Executive Branch practice.

219. 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 yes or no.

Yes; in accordance with applicable laws and long-standing Department and Executive Branch practice.

220. 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 yes or no.

Yes; in accordance with applicable laws and long-standing Department and Executive Branch practice.

221. 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 yes or no.

Yes; in accordance with applicable laws and long-standing Department and Executive Branch practice.

222. 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 yes or no.

Yes; in accordance with applicable laws and long-standing Department and Executive Branch practice.

223. 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 yes or no.

Yes; in accordance with applicable laws and long-standing Department and Executive Branch practice.

224. 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 yes or no.

Yes; I agree to protect DoD personnel from unlawful retaliation.