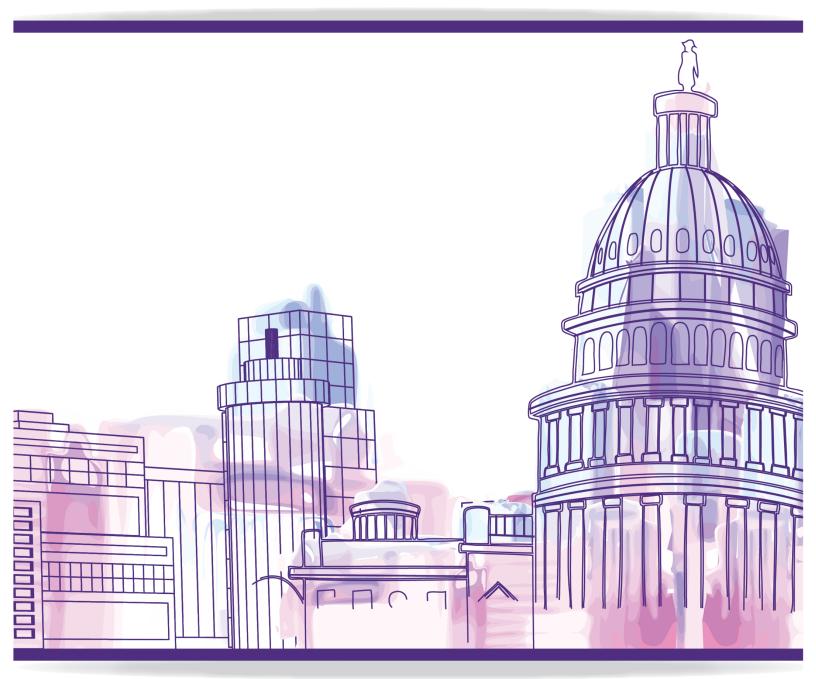


National Asset Leadership Strategy

Asset Leadership Network Policy Initiative January 2021







The National Asset Leadership Strategy

Structural Problems Require Structural Solutions

January 13, 2021

Dr. Tony Allen Chairman Biden-Harris Inauguration Committee

The Biden-Harris Transition Team is addressing many disparate issues across the entire spectrum of U.S. citizens, geography, industry sectors and legislation governing each. The Asset Leadership Network would like to respectfully offer a thoughtful, proven approach to the formidable challenge ahead.

To assist the Transition Team, the National Asset Leadership Strategy from the Asset Leadership Network provides the Biden-Harris Transition Team a successful path to address all national assets using a unified approach based on proven practices that provide dramatic benefits to organizational owners. When the management of all U.S. assets aligns under a single strategy that provides a unified direction and flexibility for different industry sectors and agencies, meaningful results accrue from using a common language, involvement of all relevant stakeholders, requirement for similar measurements and other shared best practices.

While asset leadership and asset management are overarching principles not typically considered an avenue to greatly enhance mission success, establishing a National strategy for assets will significantly contribute to the achievement of many Biden-Harris Administration goals. Our confidence in this outcome is supported by the numerous U.S. Federal Agencies that are already using this approach to asset leadership and asset management without any requirements or legislation on an individual basis. A National Asset Leadership Strategy established by the Biden-Harris Administration will draw on the experience of these leading agencies and will enable dramatic benefits to be achieved by all federal agencies.

The Asset Leadership Network and its industry member Grant Thornton are happy to provide the appropriate Biden-Harris Transition Team members with a web meeting at its convenience to assist understanding of the following material and provide insights to best shape the next steps.

Jim Dieter CEO Asset Leadership Network jdieter@AssetLeadership.net Moshe Nelson Principal, Grant Thornton Senior Fellow, Asset Leadership Network moshe.nelson@gt-us.com





1.0 NALS Executive Summary

From a strategic perspective, the National Asset Leadership Strategy (NALS) addresses:

- All national objectives
- 2. The assets used to achieve those objectives
- 3. Objectives for the performance of those assets
- 4. An approach for linking achievement of national objectives to the management of national assets
- 5. The stakeholders interested in those objectives and assets
- 6. A standard way of describing those assets
- 7. Sector Asset Leadership Structures (SALS) to address sector specific implementation activities

The U.S. Federal Government can use the NALS structure to achieve dramatic asset management results.

2.0 What is the NALS and How Does It Work?

The National Asset Leadership Strategy (NALS) framework is built on the management systems approach used by ISO 55000 and other management systems standards, e.g., ISO 9000, ISO 14000, etc. It identifies the following six elements as fundamental to a national asset management system and addresses the primary question associated with each element.

1.0 National Objectives	What are the nation's objectives?
2.0 Taxonomy	What do we mean when we talk about assets?
3.0 Stakeholders	What organizations and individuals have an interest in the NALS and nation's assets?
4.0 Scope	What assets are included in the NALS?
5.0 Asset Management Objectives	What considerations regarding the management of assets are important to achieving National Objectives?
6.0 Effective Asset Management Systems	How do organizations successfully achieve their programmatic objectives through the effective management of assets?

Figure 1: NALS Key Concepts





3.0 National Objectives - What are the nation's objectives?

National objectives are established as results to be achieved by the nation. Identifying those objectives is the starting point of identifying the assets needed to achieve them. Organizations across various levels of government as well as the private sector manage assets, which support initiatives to achieve specific national objectives. *Figure 2* groups U.S. national objectives into five categories.

Environment Leadership Dominant military · Clean air Full employment Safe communities · World leadership Preserve national · Rule of law Clean water Equal opportunity Responsible heritage membership in Political Sustainable cities Strong markets the world of Good health and representation and communities · A social safety net nations well-being Safeguarding Safe, affordable Responsible Innovation people and assets Quality education energy consumption and · Peace, justice, Mobility production and strong Efficiency institutions

Figure 2: National Objectives by Category



Key Concept: An understanding of national objectives is the basis for asset-related decisions





4.0 Taxonomy - What do we mean when we talk about assets?

The groundbreaking ISO 55000 Asset Management standard defines an asset as an "item, thing, or entity that has actual or potential value to an organization." NALS focuses on the physical and non-physical assets that directly impact the achievement of national objectives.

Developing a national asset leadership strategy requires agreement on characteristics or qualities that best describe the nation's assets. A taxonomy that does this well is based on the innate characteristics of the asset, not on the asset's ownership, use, cost, or other factors. *Figure 3* presents such an asset taxonomy that provides a common set of terms for discussing assets.

Form is the highest level in the asset taxonomy structure and breaks an organization's assets into Physical and Non-Physical. Physical assets include those that we traditionally think of as assets (constructed resources) and others that can be impacted and utilized by our operations (natural resources). Non-Physical assets include virtual assets (networks, data, and software) and conceptual assets (management and control systems, perceptions - including reputation, relationships, and knowledge).

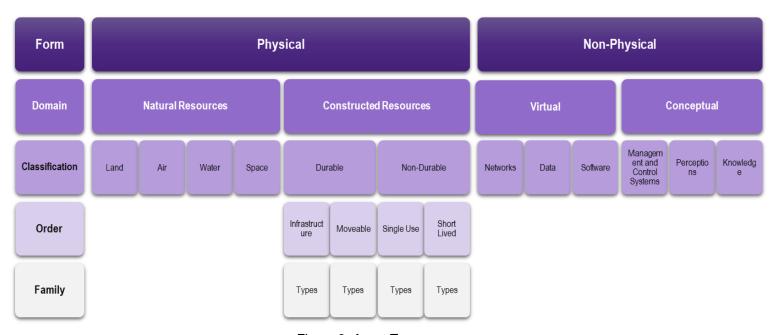


Figure 3: Asset Taxonomy

Key Concept: The breadth of asset types is all encompassing





5.0 Stakeholders – What organizations and individuals have an interest in the NALS and nation's assets?

As defined by ISO 55000, a stakeholder is a "person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or activity." From the perspective of developing a national strategy, stakeholders are grouped two ways: first into Public and Private Sector stakeholders and second into Asset Owners and Operators and Influencers as shown in *Figure 4* below.

Asset owners and operators achieve national objectives by the direct management of their assets. Other stakeholders influence the actions of asset owners and operators to achieve national objectives. Throughout the development of the NALS, we identified the key stakeholders for this strategy They include:

- Federal Agencies
- Congress
- The Administration
- States and Municipalities
- Private Asset Holders

- Not for Profits
- Citizens Groups and General Public
- Advocacy Groups
- Government Accountability Office
- Non-governmental Oversight Groups

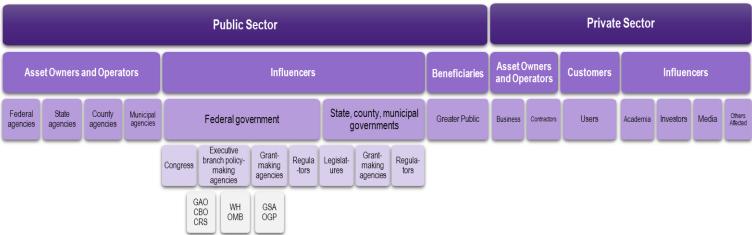


Figure 4: Stakeholder Taxonomy



Key Concept: Stakeholders inform national objectives and how assets support those

6.0 Scope - What assets are included in the NALS?

National assets are defined as assets that support national objectives and include all asset forms, domains, and classifications presented in the preceding taxonomy. The scope of national assets includes assets, wherever they are located, that are owned or controlled by any level of the US government or by private sector entities whose asset investment decisions are affected by US government actions or policies.





7.0 Asset Management Objectives – What considerations regarding assets are important to achieving National Objectives?

Asset management objectives address the performance of the assets and support accomplishment of the national objectives. In the absence of enduring asset management objectives, typical objectives tend to be based on near term political exigencies. Enduring asset management objectives provide a long-term vision and context, while leaving ample opportunities for short term decisions. Enduring asset management objectives are:

- Sustainability
- Predictability
- Effectiveness
- Efficiency
- Innovation
- Resilience

- Cost effectiveness
- High ROI
- High quality
- Interoperability/adaptability
- Environmental impact
- "Where needed, when needed"
- Accessibility
- Acceptable risk profile
- Regulatory compliance
- Affordability
- Lifecycle funding



Key Concept: Enduring national asset management objectives inform political exigencies and short-term decisions

8.0 Effective Asset Management Systems – How do organizations successfully achieve their programmatic objectives through the effective management of assets?

The asset management fundamentals of value, alignment, leadership, and assurance have been applied in specific instances by asset owners and operators across the Federal government, states, municipalities, and the private sector. However, these fundamentals have not been applied at the federal policy level. Adoption of a National Asset Leadership Strategy (NALS) presents the remarkable opportunity to improve value from assets and asset management for the Federal Government and beyond. Fortunately, a publicly available set of requirements for effective asset management systems is given in ISO 55001.

International experience confirms the promise of the ISO 55000 standards. Public and private organizations using these standards are realizing 10%, 20% and greater savings on net assets, and realizing other important benefits. We have management systems approaches to human resources and finance, but not to the other key aspect of every organization – assets. The three core standards are:

- ISO 55000: Asset Management Overview, Principles and Terminology
- ISO 55001: Asset Management Management Systems Requirements
- ISO 55002: Asset management Management systems Guidelines for the application of ISO 55001

All are ANSI American National Standards. They provide the necessary terminology, background, framework and guidance to implement asset management systems in organizations. A significant body of knowledge and related training and services supports the systems approach to asset management.



Key Concept: Effective asset management systems are required to connect the management of national assets to the achievement of national objectives.

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9.0 Sector Asset Leadership Structures (SALS)

Structural problems require structural solutions. The NALS provides an overall structure for addressing all the Nation's assets in a comprehensive manner. We decided that the best initial way to implement the NALS was according to different sectors, mainly because the key stakeholders are organized that way. This is clearly the case with infrastructure sectors such as transportation, energy, manufacturing, water utilities, government facilities, and others. Each of these sectors is overseen or influenced by different executive and legislative agencies and deals with performance expectations that are often unique to it. The Sector Asset Leadership Structures (SALS) document collects information about the range of asset types in the sector, the national objectives associated with the sector, the key stakeholders, and other information that will inform specific next steps for engaging the key stakeholders in adopting effective asset management systems. A series of questions was created (see Figure 5) to guide the collection of this information.

The next steps developed from this document will create a clear path for each sector to follow in moving from the current state to the desired end state, in which the asset owners and operators in the sector will successfully achieve, and sustain the achievement of, the national objectives for which they are responsible.

Topic	Description
Defining the Sector	What sector is being addressed?
	2. What is the breadth of the sector? What is the scale of the sector? (e.g., importance to the nation, financial terms)
Current State	What are the most pressing problems facing this sector?
	4. What are the strengths of this sector?
	5. What is the American Society of Civil Engineers (ASCE) Report Card Score for the sector, or the results of comparable independent assessments?
Boundaries	6. What laws and regulations impact and guide this sector?
	7. What are the overlaps with other SALS Strategies? For example, how does the strategy for energy sector overlap with the strategies for the other sectors?
Sector Objectives	8. What are the national objectives associated with this sector? (e.g., maintaining clean, reliable sources of drinking water; providing adequate, reliable sources of energy while reducing the carbon footprint required to do so; etc.)
Categories of Assets Supporting these Objectives	9. What categories of assets are included?
Stakeholders interested in these objectives and assets	10. Who are the key stakeholders and how do they interact with one another.(reference stakeholder chart)?
	11. How will social responsibility be addressed throughout the system and process?
	12. How will stakeholders be included in the development of this document?
Sector Asset Management Objectives	13. What are the objectives for asset management activities in this sector?
	14. What are the objectives for the performance of those assets? For example: safety, reliability, accessibility, maintainability, affordability/cost effectiveness
	15. How are these objectives linked to Sector National Objectives?





Topic	Description
Management System	16. How will ISO 55000 standards support this effort?
	17. What other voluntary consensus standards and other best practice documents are relevant? For example, ASTM Asset Management Standards, Government Accountability Office (GAO), or leading industry professional reports.
Obstacles	18. What are important obstacles to address for the sector asset management system? (e.g., institutions, laws, cultural, human and capital resources)
Compliance	19. How will adoption of ISO 55000, use of ISO 55000, compliance with ISO 55000, and overall success be measured in this sector?
	20. Will a certification requirement, the most compelling evidence of adoption, be considered for this sector?
Benefits	21. How will the sector's performance against its objectives be measured?

Figure 5: Sector Asset Leadership Structure (SALS) Questions