

NavigatOR Vision

Characteristic	Current State	Future State (navigatOR)	Mechanism to Enable Change
Integration of GIS Technologies in Enterprise Process	<ul style="list-style-type: none"> • Use of GIS technology and access to spatial data uneven across and within levels of government. • Many government agencies (at all levels) are underserved. • Regions of the state, especially in the east and south, are technologically lagging. 	<p>Integration of GIS in all levels of enterprise business activities will be phased in. Includes many effective technical approaches including:</p> <ul style="list-style-type: none"> • Web-based applications using Framework datasets as foundation • Server-based GIS applications and services with Web-based access • Geographic query and analysis functions “embedded” into or transparently accessed by other applications (not requiring user access to GIS software) • Easy access to geographic data by multiple applications and geographic-enabling of nonspatial databases • Regional Resource Centers encourage coordinated integration with local and regional systems 	<ul style="list-style-type: none"> • Investment of political capital and financial resources toward the creation of navigatOR by executive and legislative leaders at all levels of government. • Creation of Regional Resource Centers. • Formal adoption of enterprise IT/GIS principles and practices • Collaborative development of navigatOR strategic plan and action plans.
Cooperation and Collaboration in GIS Projects	<ul style="list-style-type: none"> • Participation in cooperative/collaborative GIS development is good. However, most efforts are ad hoc, opportunistic, and limited to short-term projects or focused on specific program areas. 	<ul style="list-style-type: none"> • Extensive and integrated administrative framework exists to support collaborative and cooperative GIS project development and execution. • Set of effective policies, legal instruments, administrative practices, and project management procedures and tools to encourage and support collaboration and partnerships • Direct management and technical support to help parties organize and execute joint efforts and to meet requirements for standards that support information and technology sharing 	<ul style="list-style-type: none"> • Further development of relationships/partnerships. Acceptance of collaboration and cooperation model for positive participation in governance structure. • Development of specific tools, instruments, and administrative procedures • Possible changes to, or new, policies and legislation that better supports and lends incentives for collaboration and partnerships
Governance and Organizational Structure	<ul style="list-style-type: none"> • Organizational framework is voluntary without strong lines of authority or policies. • Biennial administrative fee supports coordination office (GEO) with small staff and some Framework data development. • Limited authority to initiate changes in support of true enterprise GIS. 	<ul style="list-style-type: none"> • Enterprise activity recognizes the fundamental importance of location in decision-making. • Governance/organizational structures support data and administrative interactions across “enterprise.” • Data collection and maintenance efforts are coordinated through the efforts of an expanded staff resource. • All framework activity is supported financially and politically. 	<ul style="list-style-type: none"> • Executive authority for a strong governing Board with equitable representation from state, federal, regional, tribal, local levels. • Formal governance structure that includes other organizational entities under the Governing Board and set of formal policies • Authority vested with Board to coordinate all government geospatial investments.
Geographic Data Coverage and Quality	<ul style="list-style-type: none"> • Statewide coverage for most Framework themes does not exist. • Several data development programs have been initiated but are progressing, in most cases, slowly. • Quality and currency of data is moderate to poor for most Framework themes • There are insufficient incentives and/or resources to collaborate and cooperate in the statewide database development 	<ul style="list-style-type: none"> • All Framework data themes are created statewide and at the appropriate scale for the Oregon user community. • All Framework data themes are managed as critical assets with an effective stewardship program for ongoing maintenance and management • Coverage of Framework data is much more consistent statewide • Overall data quality remains high through effective QC and QA procedures and tools 	<ul style="list-style-type: none"> • More detailed data model, design and technical specifications for Framework data • More detailed identification or responsibilities for data stewardship and management of data conversion • Formal program and plan for Framework data development with clear funding relationships and responsibility

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Geographic Data Maintenance	<ul style="list-style-type: none"> For most Framework data themes, systematic maintenance programs for update and maintenance are not in place. Stewardship roles not well defined Effective procedures and tools for ongoing data update are generally not in place for most data themes 	<ul style="list-style-type: none"> All Framework data are consistently and systematically maintained for statewide application. Clear set of procedures and tools for update and posting of data are in place Local and federal participation in maintenance and stewardship activities are encouraged and enabled Metadata are always generated for data sets and any data maintenance updates. Robust practices and systems in place to support database administration and monitoring including back-up, disaster recovery 	<ul style="list-style-type: none"> Clear set of formally approved standards and assigned responsibilities for data update, quality assurance Procedures for timely update and posting of data are implemented Effective applications to facilitate update and quality control/quality assurance and posting of Framework data
Access to Geographic Data	<ul style="list-style-type: none"> The Oregon Geospatial Data Clearinghouse (OGDC) provides Web-based access to baseline geospatial data. Some limitations in data use because of format and coordinate system problems Some local government and regional data suppliers provide Web accessible data but no general access to local data across the state Local and regional data providers have varying policies and legal/financial requirements for data access 	<ul style="list-style-type: none"> More robust Web-based portal allowing access to wider range of geographic data with more user friendly environment Effective links to data custodians and integrators around the state to increase the type and quality of data available Regional Resource Centers providing convenient support for users in specific areas of state 	<ul style="list-style-type: none"> Better understanding of the enterprise-oriented “business of government” through collaborative development of the Oregon Geographic Information Board. Incorporation of GIS functionality in e-Gov solutions for enterprise business processes
Web-based Services	<p>The provision of government services through the Internet and Intranet is growing. These services include spatial analyses, routing problems, and locate businesses and properties in a simple manner using a generic web browser. GEO’s website links to a graphical window for displaying spatial data.</p>	<ul style="list-style-type: none"> Improved Web-based portal with more user-friendly services Adherence to emerging Web-based standards and search functionality Increased adoption of Web-based server-centric model for Internet and Intranet access and move away from need for desktop licenses of GIS software 	<ul style="list-style-type: none"> Adoption of standards for Web portal development and ongoing support. Data licensing and data privacy concerns must be resolved systematically navigatOR Governing Board must be able to establish and enforce policies in these areas
Integration with External Systems and Databases	<ul style="list-style-type: none"> The limited understanding of the business role of “geographic data” across government agencies makes it difficult to estimate the current state of the integration of GIS with external systems and databases But many agencies see value of locational identifiers as a means to integration Interest growing in moving toward a more formal “enterprise IT architecture” in state government with GIS as a major component 	<ul style="list-style-type: none"> Ongoing design and development will include focus on opportunities for integration through wise definition of data formats and common data keys Encourage all IT and GIS development projects to explore means to geographically enable all systems, with technical support to find best ways to integrate or embed GIS data or functionality with “external” systems 	<ul style="list-style-type: none"> Appropriate measure of which external systems/databases should be linked to existing/proposed Framework themes Collaborative development of implementation plan for integration efforts

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Funding and Resource Availability	<ul style="list-style-type: none"> • Current state agency support for GEO and coordinated data development is helpful but inadequate to build effective enterprise GIS environment • Multiple federal, state, and local agencies spend large amounts of money on GIS technology and data, but effective channeling of these funds is poor and not contributing directly to a coordinated statewide GIS environment • Multiple funding mechanisms at state level: <ul style="list-style-type: none"> — DAS-managed administrative fee — Legislation (like ORMAP and OEM) — Legislative Emergency Board grant — License fees for data access 	<ul style="list-style-type: none"> • A governance structure that will stabilize financial and administrative commitment to geospatial data technologies and resources • Linking of navigatOR goals to enterprise IT programs and initiatives to make more effective use of existing and future funds • Additional funds to be leveraged through cooperative data development agreements and partnerships, as well as collaborative short- and long-term planning and budgeting • Process and commitment to pursue and achieve funding from “non-traditional” sources • Substantially improved partnerships for the maintenance and distribution of geospatial data resources are established 	<ul style="list-style-type: none"> • Baseline investments in GIS data and services are established and widely accepted • Geospatial investments at all levels are leveraged to implement collaboratively developed navigatOR strategy • Accounting mechanism in place to capture efficiencies directly attributable to navigatOR • Implementation plan for metrics mirrors developmental plan for navigatOR (multiple phases)
Core Management and Support to Users	<ul style="list-style-type: none"> • General recognition in many agencies and organizations regarding value of GIS technology and data, but administrative environments tend to be oriented toward distributed authority as it relates to specific programs and mandates, not statewide information management efforts 	<ul style="list-style-type: none"> • Governing Board with participation and/or active support of senior officials • Governance elements that include technical, policy, and user input • Support and build on the state’s commitment to enterprise activity as it relates to geospatial data and data technologies. • Effective education and outreach programs aimed at senior management and at users • Ongoing support from GEO & Regional Resource Centers 	<ul style="list-style-type: none"> • Funding and resource support for staff positions required implementing the navigatOR concept • Organizational support for the creation of distribution mechanisms related to geospatial data and technological expertise • Authority for siting of, and staff training at, regional resource centers