

THE SPACE ECONOMY AND REGIONAL ECONOMIC DEVELOPMENT

A 60-INFOGRAPHIC LEARNING SERIES FOR REGIONAL ECONOMIC DEVELOPERS

Space is more than missions beyond Earth. It is a powerful engine for innovation, investment, jobs, infrastructure, and sustainable growth in communities everywhere. This 60-part series provides a comprehensive roadmap for building a thriving regional space economy.

WHY IT MATTERS FOR YOUR REGION



DRIVES ECONOMIC GROWTH AND JOBS



FOSTERS INNOVATION AND ENTREPRENEURSHIP



DEVELOPS HIGH-SKILLED TALENT AND CAREERS



ATTRACTS INVESTMENT AND GLOBAL PARTNERS



STRENGTHENS INFRASTRUCTURE AND RESILIENCE



SUPPORTS SUSTAINABILITY AND QUALITY OF LIFE

PART ONE: FOUNDATIONS AND OPPORTUNITIES (1–30)

BUILD UNDERSTANDING, CAPACITY, AND EARLY MOMENTUM



UNDERSTAND THE SPACE ECONOMY

Key concepts, sectors, trends, and global context



ASSESS REGIONAL OPPORTUNITIES

Assets, strengths, markets, and opportunities



ENGAGE STAKEHOLDERS

Build awareness, partnerships, and collaboration



DEVELOP WORKFORCE AND TALENT

Skills needs, education, and talent pipelines



PLAN AND MEASURE PROGRESS

Strategies, action plans, and performance metrics



JOIN THE SPACE SUPPLY CHAIN

Pathways for manufacturers and service providers



USE SPACE DATA AND SERVICES

Earth observation, connectivity, and more



LEVERAGE RESEARCH AND INNOVATION

Universities, R&D, and technology transfer



SUPPORT ENTREPRENEURSHIP

Startups, incubators, and commercialization



ACCESS FUNDING AND RESOURCES

Financing options and public support programs

60 INFOGRAPHICS
ONE COMPREHENSIVE
ROADMAP FOR
REGIONAL SPACE
ECONOMY SUCCESS

PART TWO: GROWTH, COMPETITIVENESS, AND LEADERSHIP (31–60)

ACCELERATE IMPACT, SCALE, AND LONG-TERM COMPETITIVE ADVANTAGE



BUILD COMPETITIVE ADVANTAGE

Specialization, clusters, and differentiation



STRENGTHEN SUPPLY CHAINS

Resilience, gaps, and global integration



LEVERAGE PROCUREMENT AND MARKETS

Government as a customer and market builder



COMMERCIALIZE AND SCALE COMPANIES

Startups, scaleups, and industry growth



ATTRACT INVESTMENT AND CAPITAL

Venture capital, strategic investors, and FDI



INVEST IN INFRASTRUCTURE

Facilities, testbeds, spaceports, ground stations, and digital infrastructure



MANAGE RISK AND STAY COMPLIANT

Cybersecurity, dual-use, export controls, and regulations



EXPAND GLOBALLY

International markets, partnerships, and branding



ENSURE INCLUSIVE AND SUSTAINABLE GROWTH

Community benefits, equity, and sustainability



LEAD FOR THE FUTURE

10-year roadmap, continuous improvement, and lasting impact

WHO THIS SERIES IS FOR



ECONOMIC DEVELOPERS AND REGIONAL LEADERS



GOVERNMENT AND PUBLIC SECTORS



INDUSTRY, INVESTORS, AND ENTREPRENEURS



EDUCATORS, RESEARCHERS, AND WORKFORCE PARTNERS



COMMUNITY AND STAKEHOLDER PARTNERS



LET'S BUILD A STRONGER, MORE INNOVATIVE, AND MORE PROSPEROUS FUTURE—TOGETHER.

THE SPACE ECONOMY STARTS HERE. THE IMPACT IS EVERYWHERE.



TWO PARTS. SIXTY TOPICS. ENDLESS POSSIBILITIES.

EVERY REGION HAS A PLACE IN THE SPACE ECONOMY. THIS SERIES WILL HELP YOU FIND IT AND BUILD IT.



EXPLORE ALL 60 INFOGRAPHICS.

CREATE OPPORTUNITY. INSPIRE GROWTH. SHAPE THE FUTURE.

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Introduction

The Space Economy and Regional Economic Development examines how regions can understand, participate in, and develop economic activity connected to the space economy. The subject matters to regional economic developers because the collection considers not only space-specific activities, but also the ways satellite data, connectivity, manufacturing, research, infrastructure, workforce capabilities, and related technologies connect space markets with traditional industries and regional economies. The document is an image collection of 61 infographics arranged as a progression from core concepts to regional strategy and long-term implementation. It begins by defining the space economy, explaining why it is relevant to regional economic development, describing how it creates value on Earth, and identifying its major segments. The opening section also considers connections to traditional industries, the types of

regions that can participate, and the position of a region within the space economy value chain. The next group of infographics focuses on regional assessment and competitive positioning. It addresses how regions can map existing space economy assets, identify hidden space-capable companies, determine which opportunities match regional strengths, and assess competitiveness, maturity, specialization, and competitive advantage. It also examines the role of anchor space companies, regional manufacturers, non-space companies entering space supply chains, and efforts to identify and address supply chain gaps while improving resilience. A substantial portion of the collection concerns the foundations of regional participation. Topics include infrastructure for space economy clusters, the use of satellite data and services, Earth observation, satellite connectivity, workforce skills, talent pipelines, universities and research institutions, entrepreneurship, and the

commercialization of university space research. The collection also considers cluster formation and growth, partnerships, support for smaller and rural regions, and the development of inclusive, community-supported regional space activity. The infographics then turn to finance, investment, procurement, and market creation. They examine how space economy innovation is financed, the financing gaps that may arise at different company growth stages, and ways regions can attract venture capital, strategic investors, foreign space investment, and space companies. Public procurement, regional governments as lead customers, procurement that supports local companies, and the conditions that make a site ready for space economy investment are treated as related tools for developing regional markets. Specialized infrastructure is considered through questions about when it makes economic sense, whether a region should develop a spaceport, and how ground stations can create regional economic opportunity. Later sections address technology, regulation, international activity, and regional positioning. They cover space data as a

regional digital industry, opportunities created by artificial intelligence and space data, cybersecurity within a regional space cluster, dual-use technologies, export controls, international market entry, and the development of a globally recognized space economy brand. Talent competition and regional participation are revisited in relation to the broader challenge of sustaining growth and community support. The collection progresses toward planning and accountability. It presents questions about the policies that can support regional space economy development, the preparation of a development strategy and action plan, and the measurement of success. The final infographic asks how a region can build a 10-year space economy growth roadmap, bringing together the assessment of assets and strengths, supply chains, talent, infrastructure, finance, procurement, technology, investment, policy, markets, and inclusion. Taken together, the sequence frames regional space development as a process of understanding existing capabilities, selecting appropriate opportunities, building the required ecosystem, and organizing

action over time. The document provides a visual reference for examining the relationship between the space economy and regional economic development, from foundational concepts and regional diagnosis through implementation, market development, and long-term planning.

WHAT IS THE SPACE ECONOMY?

UNDERSTANDING THE OPPORTUNITIES FOR REGIONAL ECONOMIC DEVELOPMENT



DEFINITION

The space economy includes all activities that create value in and from space, including satellites, launch, space-enabled services, data, manufacturing, research, and public-sector uses.

THE SPACE ECONOMY VALUE CHAIN

UPSTREAM



CREATE & PRODUCE
Design, manufacture, components, materials, R&D, testing

MIDSTREAM



LAUNCH & OPERATE
Launch services, satellite operations, ground stations, mission control

DOWNSTREAM



DELIVER & APPLY
Data processing, analytics, applications, services for users on Earth

ENABLING SERVICES



SUPPORT & GROW
Finance, legal, insurance, education, workforce, consulting, infrastructure, policy

WHAT IT INCLUDES



LAUNCH

Launch vehicles and related services that place payloads into space.



SATELLITES

Manufacture and operation of communication, Earth observation, navigation, and science satellites.



GROUND SYSTEMS

Ground stations and networks that communicate with and control space assets.



DATA & ANALYTICS

Collecting, processing, and analyzing data to create insights and intelligence.



APPLICATIONS

Tools and services used in sectors like agriculture, transportation, energy, and disaster response.



RESEARCH & SERVICES

R&D, education, engineering, consulting, and professional services.

HOW SPACE ACTIVITIES CREATE EARTH-BASED ECONOMIC VALUE

SPACE ASSETS & INFRASTRUCTURE



Satellites, launch, and supporting systems operate in space.

DATA DOWNLINK & PROCESSING



Data is transmitted to Earth and processed into usable information.

INSIGHTS & SOLUTIONS



Analytics turn data into actionable insights and solutions.

EARTH-BASED ECONOMIC VALUE



Better decisions, greater efficiency, new services, and economic growth across communities.

WHY IT MATTERS TO REGIONS



JOBES & TALENT

Creates high-quality jobs and attracts skilled workers across many sectors.



INNOVATION

Drives research, entrepreneurship, and adoption of advanced technologies.



INVESTMENT

Attracts private capital and grows local businesses and supply chains.



RESILIENCE

Supports critical infrastructure, climate monitoring, emergency response.



SPILLOVER BENEFITS

Strengthens other industries such as IT, manufacturing, academia, and advanced services.



KEY TAKEAWAY

YOU DON'T NEED A LAUNCH SITE TO PARTICIPATE. REGIONS CAN CAPTURE VALUE ACROSS THE ENTIRE SPACE ECONOMY—FROM IDEAS AND DATA TO SERVICES AND SOLUTIONS.

WHY SHOULD REGIONAL ECONOMIC DEVELOPERS CARE ABOUT THE SPACE ECONOMY?

DRIVING GROWTH, COMPETITIVENESS, AND COMMUNITY BENEFITS



THE BIG IDEA

The space economy is more than rockets and satellites. It powers high-value jobs, stimulates innovation, strengthens infrastructure, and boosts productivity across many local industries.

REGIONAL IMPACT PATHWAY

1. SPACE CAPABILITIES



Leverage local assets, data, expertise, and infrastructure.



2. BUSINESS GROWTH



New firms, expansions, and higher productivity across industries.



3. BETTER SERVICES & INFRASTRUCTURE



Improved connectivity, decision-making, and public services.



4. REGIONAL COMPETITIVENESS



Stronger economy, attraction of talent and investment, better quality of life.

WHY IT MATTERS



JOBS & TALENT

Creates high-quality jobs and attracts and retains skilled talent.



INNOVATION

Drives R&D, entrepreneurship, and adoption of new technologies.



INVESTMENT ATTRACTION

Draws capital, grants, and private investment to the region.



SUPPLY-CHAIN DIVERSIFICATION

Strengthens local suppliers and builds more resilient economies.



RESILIENCE

Enhances ability to adapt to shocks and long-term challenges.



EXPORT POTENTIAL

Opens access to global markets and international opportunities.

HOW REGIONS BENEFIT



NEW FIRMS & EXPANSIONS

Space-related ventures and investments create jobs and tax base.



STRONGER INSTITUTIONS

Universities, colleges, and programs build talent and research capacity.



BETTER PLANNING

High-quality data improves land use, environmental, and economic decisions.



DIGITAL INCLUSION

Connectivity and data access bridge gaps and expand opportunity.



WIDER SPILLOVERS

Benefits reach many sectors—agriculture, energy, transportation, health, and more.

WHERE ECONOMIC DEVELOPERS CAN ACT



BUILD CLUSTERS

Connect local organizations and events to grow a collaborative ecosystem.



IDENTIFY SUPPLIERS

Find and prepare local companies to supply space and data value chains.



ALIGN WORKFORCE

Partner with educators to develop skills for in-demand space and data careers.



PLAN INFRASTRUCTURE

Invest in broadband, data systems, testbeds, transportation, and spaceport readiness.



BUILD PARTNERSHIPS

Engage government, industry, academia, Indigenous communities, and investors.



KEY TAKEAWAY

YOU DON'T NEED A ROCKET LAUNCH PAD TO PARTICIPATE.

EVERY REGION HAS ASSETS THAT CAN CONNECT TO THE SPACE ECONOMY—CREATING JOBS, ATTRACTING INVESTMENT, AND IMPROVING LIVES.

HOW DOES THE SPACE ECONOMY CREATE VALUE ON EARTH?

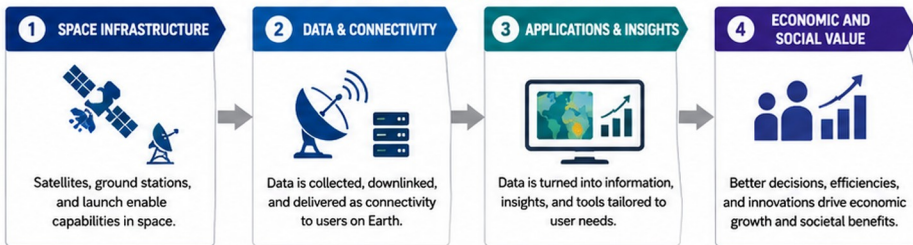
TRANSLATING SPACE ASSETS INTO LOCAL ECONOMIC OUTCOMES



CORE EXPLANATION

Value begins with space infrastructure—satellites, ground systems, and launch—and becomes economic value through data, communications, applications, and services that solve real problems and create opportunities on Earth.

THE SPACE-TO-EARTH VALUE CHAIN



VALUE SOURCES



EARTH OBSERVATION

Imaging and sensor data reveal changes, monitor conditions, and support timely decisions.



COMMUNICATIONS

Connectivity links people, devices, and assets anywhere, enabling information exchange.



NAVIGATION AND TIMING

Precise positioning and timing enable safe, efficient, and synchronized systems.



MANUFACTURING INNOVATION

Space drives advances in materials, miniaturization, automation, and quality that spill over to Earth.



SCIENTIFIC R&D

Research in space advances knowledge and creates new technologies.

WHO BENEFITS



AGRICULTURE

Optimize yields, manage inputs, and monitor crop health.



ENERGY

Improve resource management and monitor assets and emissions.



TRANSPORTATION

Enable safer navigation, traffic management, and fleet optimization.



INSURANCE

Better risk assessment and faster, fairer claims.



LOGISTICS

Track goods and assets in real time and streamline supply chains.



PUBLIC SAFETY

Respond faster to emergencies and protect communities.



URBAN PLANNING

Plan smarter cities and manage infrastructure and growth.

HOW VALUE SHOWS UP IN REGIONS



HIGHER PRODUCTIVITY

Improve efficiency and performance across industries and operations.



COST SAVINGS

Reduce waste, downtime, and operational costs.



NEW COMPANIES

Attract investment, support startups, and grow high-value jobs.



BETTER DECISIONS

Use trusted data and insights to make smarter, faster choices.



GREATER RESILIENCE

Anticipate disruptions, recover stronger.



KEY TAKEAWAY

THE SPACE ECONOMY CREATES VALUE ON EARTH WHEN SPACE-ENABLED CAPABILITIES ARE CONVERTED INTO USEFUL LOCAL PRODUCTS, SERVICES, AND POLICY TOOLS THAT IMPROVE LIVES AND DRIVE SUSTAINABLE ECONOMIC GROWTH.

WHAT ARE THE MAJOR SEGMENTS OF THE SPACE ECONOMY?

UNDERSTANDING THE MARKET STRUCTURE AND WHERE REGIONS CAN PARTICIPATE



OVERVIEW

The space economy is an end-to-end ecosystem that includes building and operating space systems, delivering data and services, and enabling the entire value chain. It spans far more than launch and spacecraft.

THE SPACE ECONOMY SEGMENT MAP

UPSTREAM



BUILD & PRODUCE

Manufacture spacecraft, components, materials, and test systems.

MIDSTREAM



OPERATE & MANAGE

Operate satellites, manage ground networks, and ensure mission performance.

DOWNSTREAM



DELIVER & USE

Transform space-based data into insights, products, and services for users.

ENABLING SERVICES



SUPPORT & ENABLE

Provide finance, legal, talent, infrastructure, policy, and business support.

THE SEGMENTS



LAUNCH SERVICES

Launch vehicles, mission management, and integration services.



SATELLITE MANUFACTURING

Satellite buses, payloads, components, avionics, and subsystems.



GROUND SYSTEMS

Ground stations, antennas, networks, and command infrastructure.



SATELLITE OPERATIONS

Mission operations, network management, control centers, and services.



DATA & APPLICATIONS

Earth observation, connectivity, analytics, navigation, and value-added services.



RESEARCH & PROFESSIONAL SERVICES

R&D, engineering, consulting, training, legal, and technical expertise.

EXAMPLES OF ACTIVITIES



LAUNCH SERVICES

- Vehicle design and financing
- Launch range operations
- Mission integration



SATELLITE MANUFACTURING

- Structure and mechanisms
- Payloads and electronics
- Testing and assembly



GROUND SYSTEMS

- Ground station operations
- Network and backhaul
- Data receiving systems



SATELLITE OPERATIONS

- Orbit and health monitoring
- Command and control
- Network and payload ops



DATA & APPLICATIONS

- Image and data processing
- Analytics and modeling
- Industry and government apps



RESEARCH & PROFESSIONAL SERVICES

- Feasibility and market studies
- Systems engineering
- Training and workforce support

WHY THIS MATTERS FOR REGIONS



TARGET NICHE OPPORTUNITIES

Focus on segments that match local strengths and needs.



BUILD SUPPLIER INFRASTRUCTURE

Develop local suppliers and industry clusters.



PLAN SMART INFRASTRUCTURE

Invest in assets and connectivity that support target segments.



ATTRACT INVESTMENT & PARTNERSHIPS

Show investors a clear path to participate in the value chain.



KEY TAKEAWAY

THE SPACE ECONOMY IS DIVERSE AND INTERCONNECTED. REGIONS SUCCEED BY ALIGNING WITH THE SEGMENT WHERE THEY HAVE THE STRONGEST CAPABILITIES—NOT BY TRYING TO DO EVERYTHING.

HOW DOES THE SPACE ECONOMY CONNECT TO TRADITIONAL INDUSTRIES?

CROSS-SECTOR OPPORTUNITIES AND SPILLOVER BENEFITS FOR REGIONS



THE CONNECTION

Space technologies, data, and services enhance how traditional industries operate, make decisions, and manage risk—improving productivity and competitiveness in sectors already present in many regions.

SPACE CAPABILITIES CONNECT TO EVERYDAY INDUSTRIES



INDUSTRY APPLICATIONS



PRECISION AGRICULTURE

Optimize yields, irrigation, and input use with satellite data and analytics.



UTILITY MONITORING

Monitor assets, detect anomalies, and reduce outages and maintenance costs.



LOGISTICS OPTIMIZATION

Track assets, optimize routes, and improve supply chain visibility.



INFRASTRUCTURE PLANNING

Use earth observation and mapping to guide siting, design, and project delivery.



RESOURCE MAPPING

Identify resources, monitor activity, and plan operations with geospatial intelligence.



CATASTROPHE RISK

Assess risk, monitor hazards, and support resilience and insurance models.



ENVIRONMENTAL COMPLIANCE

Monitor emissions, land use, and water quality to support reporting and standards.

WHY IT MATTERS



IMPROVED PRODUCTIVITY

Better information leads to smarter decisions and higher efficiency across operations.



BETTER DATA, BETTER DECISIONS

Timely, accurate insights reduce uncertainty and strengthen strategic planning.



REDUCED RISK AND DOWNTIME

Early detection and monitoring help prevent disruptions and protect assets and people.



WORKFORCE MODERNIZATION

New tools and data skills elevate the workforce and attract top talent to the region.



NEW REVENUE OPPORTUNITIES

Innovative products and services create new markets and diversify regional economies.

REGIONAL DEVELOPMENT IMPLICATIONS



SUPPLIER CROSS-OVER

Existing businesses can adapt capabilities and supply the space sector as a natural next step.



ACCELERATE INNOVATION ADOPTION

Faster uptake of proven technologies strengthens competitiveness and resilience.



BUILD WORKFORCE CAPACITY

Train in in-demand skills—data, geospatial, engineering, and systems integration.



DIVERSIFY & GROW CLUSTERS

Broader industry connections create stronger, more sustainable clusters.



KEY TAKEAWAY

THE SPACE ECONOMY DOESN'T EXIST IN ISOLATION—IT STRENGTHENS THE INDUSTRIES THAT POWER OUR REGIONS. LEVERAGING EXISTING SECTORS IS OFTEN THE FASTEST PATHWAY INTO THE SPACE ECONOMY AND TO LONG-TERM ECONOMIC GROWTH.

WHAT TYPES OF REGIONS CAN PARTICIPATE IN THE SPACE ECONOMY?

BROAD OPPORTUNITIES FOR REGIONS OF ALL SIZES, STRENGTHS, AND GEOGRAPHIES



MAIN POINT

Large metro areas, smaller manufacturing regions, rural communities, coastal regions, university towns, and remote areas can all participate in the space economy—each in ways that build on their unique strengths and assets.

REGIONAL ARCHETYPES AND LIKELY ROLES

METROPOLITAN HUBS



Innovation, R&D, entrepreneurship, and advanced services

MANUFACTURING REGIONS



Component production, systems integration, and supply chain

UNIVERSITY & RESEARCH CENTERS



Research, talent development, technology transfer, and innovation

RURAL & RESOURCE REGIONS



Data use, resource monitoring, and applied solutions for local industries

REMOTE & NORTHERN COMMUNITIES



Connectivity, Earth observation insights, sovereign operations support

COASTAL & GATEWAY REGIONS



Launch access, maritime operations, logistics, and global market connections

REGIONAL PROFILES

METROPOLITAN INNOVATION HUBS



Dense talent, startups, investors, and service providers drive innovation and commercialization.

ADVANCED MANUFACTURING REGIONS



Skilled workforce and industrial base produce parts, assemblies, and complex systems.

UNIVERSITY & RESEARCH CENTERS



World-class research and talent pipelines power discoveries and next-generation space technologies.

RURAL & RESOURCE REGIONS



Strong domain knowledge and land assets support Earth observation, agritech, and natural resource solutions.

REMOTE & NORTHERN COMMUNITIES



Vast geographies provide ideal conditions for testing, monitoring, and sovereign capabilities.

COASTAL & GATEWAY REGIONS



Ports, runways, and direct trade routes enable launch support, logistics, and global collaboration.

TYPICAL SPACE ECONOMY ROLES

REGION TYPE



METROPOLITAN HUBS



MANUFACTURING REGIONS



UNIVERSITY & RESEARCH CENTERS



RURAL & RESOURCE REGIONS



REMOTE & NORTHERN COMMUNITIES



COASTAL & GATEWAY REGIONS

COMMON ROLES IN THE SPACE ECONOMY

R&D, software and data analytics, mission design, startups, venture capital, headquarters functions

Precision manufacturing, avionics, structures, payloads, systems integration, supplier networks

Basic and applied research, technology transfer, talent development, prototyping, incubators and accelerators

Earth observation data use, resource mapping, precision agriculture, environmental monitoring

Connectivity solutions, domain awareness, Arctic operations support, testing ranges, climate and environmental insights

Launch and recovery support, maritime tracking, logistics, international trade and market access

SUCCESS FACTORS



ALIGN ASSETS TO OPPORTUNITIES

Build on your existing strengths, industries, and local assets.



BUILD STRATEGIC PARTNERSHIPS

Connect with industry, academia, government, and communities.



SPECIALIZE AND DIFFERENTIATE

Focus on a niche where you can be best-in-class and globally competitive.



BE REALISTIC AND MARKET-DRIVEN

Pursue real customer needs and scalable solutions.



KEY TAKEAWAY

NOT EVERY REGION WILL PLAY THE SAME ROLE—AND THAT'S OKAY. THE SPACE ECONOMY THRIVES WHEN EVERY REGION LEVERAGES ITS STRENGTHS AND CONTRIBUTES WHERE IT CREATES THE MOST VALUE. SPECIALIZATION IS A STRENGTH, NOT A LIMITATION.

WHERE DOES A REGION FIT WITHIN THE SPACE ECONOMY VALUE CHAIN?

IDENTIFYING REALISTIC MARKET POSITIONS BASED ON LOCAL STRENGTHS



FRAMEWORK

Regions can participate in any part of the space economy value chain—upstream, midstream, downstream, or enabling—depending on local strengths, assets, and market opportunities.

THE SPACE ECONOMY VALUE CHAIN

UPSTREAM



CREATE & PRODUCE

Design, manufacturing, components, materials, R&D, testing

MIDSTREAM



LAUNCH & OPERATE

Launch services, in-orbit operations, ground systems, mission control

DOWNSTREAM



DELIVER & APPLY

Data processing, analytics, applications, solutions for users on Earth

ENABLING SERVICES



SUPPORT & GROW

Finance, legal, insurance, education, workforce, infrastructure, policy, industry services

QUESTIONS TO ASK



What assets and industries exist locally?



Who are our nearby customers and partners?



What talent and institutions are available?



What infrastructure and capabilities are in place?



Where can local firms compete and add value?



What policies and incentives support growth?

MATCHING LOCAL STRENGTHS TO ROLES

ADVANCED MANUFACTURING



Supports components, subsystems, and mechanical systems.

UNIVERSITIES & RESEARCH CENTERS



Drive R&D, prototyping, technology development, and innovation.

SOFTWARE & DATA TALENT



Powers analytics, AI, data processing, and digital solutions.

RURAL & REMOTE COMMUNITIES



Meet connectivity needs, host ground infrastructure, and support monitoring and resilience.

COMMON ENTRY POINTS



SUPPLY CHAIN PARTICIPATION

Provide parts, materials, services, and specialized capabilities to established space companies.



SPACE-ENABLED SERVICES

Use satellite data and connectivity to solve local challenges and create new businesses.



TESTING & TECHNICAL SUPPORT

Offer testing, validation, integration, and lab facilities for missions and technologies.



DATA APPLICATIONS & ANALYTICS

Transform space data into actionable insights for industries and governments.



PUBLIC PROCUREMENT & PARTNERSHIPS

Leverage government buyer programs and partnerships to build early demand.



KEY TAKEAWAY

THE BEST POSITION FOR YOUR REGION IS THE ONE THAT MATCHES YOUR REAL ASSETS, TALENT, AND INFRASTRUCTURE TO CLEAR MARKET NEEDS IN THE SPACE ECONOMY VALUE CHAIN. START WHERE YOU CAN WIN—AND BUILD FROM THERE.

HOW CAN A REGION MAP ITS EXISTING SPACE ECONOMY ASSETS?

TURN LOCAL INFORMATION INTO A STRATEGIC INVENTORY TO GUIDE GROWTH AND INVESTMENT



PURPOSE

Asset mapping helps regions identify existing strengths, uncover hidden capabilities, reveal gaps, and find partnership opportunities to build a stronger space economy.

THE ASSET MAPPING PROCESS: 4 SIMPLE STEPS

1. IDENTIFY



Scan broadly to find all potential assets across the region.

2. CATEGORIZE



Classify assets by type, capability, maturity, and relevance.

3. VALIDATE



Verify accuracy and completeness through outreach and review.

4. VISUALIZE



Map and analyze assets to reveal patterns, strengths, and gaps.

ASSET CATEGORIES



COMPANIES

Startups, SMEs, prime contractors, and suppliers.



UNIVERSITIES

Academic programs, facilities, faculty expertise, and student talent.



RESEARCH LABS

Government and private labs, R&D centers, and innovation hubs.



INFRASTRUCTURE

Test ranges, ground stations, clean rooms, data centers, and shared facilities.



WORKFORCE

Talent pools, specialized skills, trainers, and educational pipelines.



INVESTORS

VCs, angels, banks, funds, and corporate investment partners.



GOVERNMENT ASSETS

Agencies, programs, procurement, data, and policy assets.



SUPPORT ORGANIZATIONS

Incubators, accelerators, associations, and service providers.

WHERE TO LOOK



BUSINESS DIRECTORIES

Industry databases, chambers, and membership lists.



PROCUREMENT DATA

Contracts, solicitations, awards, and vendor records.



PATENT ACTIVITY

Patent databases and technology disclosures.



UNIVERSITY PROGRAMS

Department listings, research groups, and facilities.



CLUSTER ORGANIZATIONS

Industry associations, cluster initiatives, and networks.



STAKEHOLDER INTERVIEWS

Meet with companies, researchers, and community leaders.

OUTPUTS FOR ECONOMIC DEVELOPERS



ECOSYSTEM MAPS

Interactive maps that show asset locations and connections.



FIRM & ASSET LISTS

Curated inventories of organizations and capabilities.



GAP ANALYSIS

Identify missing capabilities and emerging needs.



PRIORITY NICHES

Focus areas aligned with regional strengths and opportunities.



PARTNERSHIP TARGETS

Potential collaborators for projects, investments, and innovation.



KEY TAKEAWAY

ASSET MAPPING TURNS LOCAL KNOWLEDGE INTO STRATEGIC INTELLIGENCE—OFTEN REVEALING MORE CAPACITY, CONNECTIONS, AND OPPORTUNITY THAN YOU EXPECT.

WHAT MAKES A REGION COMPETITIVE IN THE SPACE ECONOMY?

THE INGREDIENTS OF A SUCCESSFUL REGIONAL ECOSYSTEM



KEY IDEA

Regional competitiveness in the space economy comes from the right mix of talent, institutions, infrastructure, networks, and market focus working together to deliver value.

CORE COMPETITIVENESS FACTORS



TALENT

Access to diverse, skilled talent across engineering, data, business, and operations.



RESEARCH & INNOVATION

Strong R&D institutions and a culture of innovation.



INFRASTRUCTURE

Advanced test facilities, digital networks, and reliable utilities.



SUPPLY CHAINS

Deep supplier capabilities and connected value chains.



CAPITAL ACCESS

Investors, lenders, and programs that fuel startup and scaleup growth.



POLICY & REGULATION

Predictable rules, incentives, and efficient approvals.



NETWORKS

Connections to partners, customers, mentors, and global markets.



QUALITY OF PLACE

Affordable living, culture, amenities, and environmental sustainability.

WHAT ECONOMIC DEVELOPERS CAN INFLUENCE



CONVENE & CONNECT

Bring stakeholders together to solve problems and unlock opportunities.



BUILD THE BRAND

Position the region highlighting strengths, successes, and differentiators.



ALIGN WORKFORCE

Partner with education and training providers to grow the right talent pipeline.



ADVOCATE & INVEST

Champion infrastructure, facilities, and policies that enable long-term competitiveness.



ENGAGE INVESTORS

Connect startups and scaleups with capital and strategic partners.

THE REGIONAL COMPETITIVENESS FRAMEWORK



HOW THESE FACTORS CREATE ADVANTAGE



MORE INNOVATION

Strong ecosystems generate novel ideas and breakthrough solutions.



STRONGER FIRMS

Companies start, scale, and stay—creating jobs and driving productivity.



GREATER MARKET ACCESS

Networks and reputation open doors to customers, partners, and global opportunities.



LOWER BARRIERS

Better policies, infrastructure, and support reduce risk and cost.



SUSTAINABLE GROWTH

More investment, higher wages, and resilient, inclusive regional growth.



KEY TAKEAWAY

NO SINGLE FACTOR IS ENOUGH. REGIONAL COMPETITIVENESS IN THE SPACE ECONOMY COMES FROM A COORDINATED ECOSYSTEM WHERE BUSINESSES, INSTITUTIONS, AND COMMUNITIES WORK TOGETHER TO WIN.

HOW CAN REGIONS IDENTIFY HIDDEN SPACE-CAPABLE COMPANIES?

FIND FIRMS THAT CAN SERVE SPACE MARKETS—EVEN IF THEY DON'T CALL THEMSELVES SPACE COMPANIES.



MAIN MESSAGE

Many companies already have capabilities needed for space missions in manufacturing, electronics, software, materials, robotics, engineering, and specialized services. We just need to find them, validate their fit, and connect them to opportunities.

A PATHWAY TO DISCOVER HIDDEN CAPABILITIES

1. SEARCH SECTORS



Scan target industries and clusters for firms with relevant capabilities.

2. SCREEN CAPABILITIES



Use capability signals to identify firms with space-applicable strengths.

3. VALIDATE READINESS



Assess quality systems, process maturity, and ability to meet space requirements.

4. CONNECT TO MARKETS



Introduce firms to primes, programs, buyers, and resources to grow in space supply chains.

WHERE TO LOOK



PRECISION MANUFACTURING

Machining, forming, assembly, finishing, and advanced fabrication.



ELECTRONICS

PCB assembly, harnessing, power electronics, and embedded systems.



SENSORS

Motion, pressure, temperature, and other instrumentation.



PHOTONICS

Optics, lasers, imaging, and precision alignment.



SOFTWARE AND AI

Embedded software, data analytics, AI/ML, and simulation tools.



CYBERSECURITY

Secure systems, software assurance, and compliance expertise.



ADVANCED MATERIALS

Composites, metals, coatings, and specialty materials.



TESTING SERVICES

Environmental test, NDT, calibration, and reliability engineering.

SIGNS A FIRM MAY BE SPACE-CAPABLE



QUALITY SYSTEMS

Certified to standards (ISO 9001, AS9100, Nadcap, ITAR, etc.).



HIGH-RELIABILITY PRODUCTION

Focus on precision, consistency, and process control.



EXPORT EXPERIENCE

Ships internationally and meets regulatory and documentation requirements.



AEROSPACE OR DEFENSE BACKGROUND

Existing work in aerospace, defense, or other high-reliability industries.



R&D INTENSITY

Invests in innovation, prototypes, and continuous improvement.



SPECIALIZED TALENT

Engineers and technicians with advanced or niche expertise.

PRACTICAL OUTREACH METHODS



SUPPLIER SURVEYS

Use short surveys to uncover capabilities and quality systems across industries.



ONE-ON-ONE INTERVIEWS

Talk with company leaders to understand strengths and interests.



CLUSTER EVENTS

Host roundtables, workshops, and industry days to surface talent.



PROCUREMENT DATABASES

Leverage state, federal, and private databases to find potential suppliers.



UNIVERSITY REFERRALS

Partner with universities and colleges for referrals and tech transfer leads.



KEY TAKEAWAY

HIDDEN SPACE-CAPABLE COMPANIES ARE EVERYWHERE. YOUR REGION'S GROWTH STARTS BY FINDING THEM, VALIDATING THEM, AND CONNECTING THEM TO THE SPACE ECOSYSTEM.

WHICH SPACE ECONOMY OPPORTUNITIES BEST MATCH REGIONAL STRENGTHS?

ALIGNING LOCAL ASSETS WITH WINNABLE MARKET NICHES



MATCH PRINCIPLE

Regions succeed in the space economy by matching real strengths to specific markets where they can create unique value—rather than chasing every opportunity.

OPPORTUNITY MATCHING FRAMEWORK

1 INVENTORY STRENGTHS



Map local assets, capabilities, talent, infrastructure, and existing industries.

2 IDENTIFY MARKETS



Scan space economy markets and trends to find relevant opportunity areas.

3 TEST FIT



Evaluate how well local strengths align with market needs and gap.

4 PRIORITIZE NICHES



Select the highest-potential niches to focus resources and build momentum.

LOCAL STRENGTHS TO ASSESS



ADVANCED MANUFACTURING

Precision production, materials expertise, and quality systems.



SOFTWARE AND DATA TALENT

Engineering, AI/ML, data science, and cybersecurity skills.



RESEARCH INSTITUTIONS

Universities, labs, and innovation centres.



INFRASTRUCTURE AND TEST ASSETS

Test ranges, labs, simulators, and unique facilities.



DOMAIN INDUSTRIES

Existing sectors that create demand and supply expertise.



PUBLIC-SECTOR DEMAND

Local, state, and federal needs for space solutions.

GOOD MATCHES FOR DIFFERENT REGIONS



MANUFACTURING REGIONS

→
Components and subsystems



UNIVERSITY REGIONS

→
R&D and prototyping



RURAL/RESOURCE REGIONS

→
Earth observation services



REMOTE/COASTAL REGIONS

→
Connectivity and ground infrastructure



METRO HUBS

→
Analytics and digital applications

SELECTION CRITERIA



MARKET DEMAND

Strong, growing need with clear value for customers.



CUSTOMER ACCESS

Ability to reach and serve target customers effectively.



REGIONAL ADVANTAGE

Distinct strengths that create unique value.



SCALABILITY
Potential to grow and compete beyond the region.



PARTNERSHIP READINESS
Existing or potential partners to accelerate success.



KEY TAKEAWAY

THE BEST SPACE ECONOMY OPPORTUNITIES ARE THE ONES WHERE LOCAL STRENGTHS MEET CLEAR CUSTOMER NEEDS—AND WHERE REGIONS CAN BUILD A REPEATABLE COMPETITIVE ADVANTAGE.

HOW CAN REGIONAL MANUFACTURERS ENTER THE SPACE SUPPLY CHAIN?

TURNING EXISTING INDUSTRIAL CAPABILITIES INTO SPACE MARKET ACCESS

CORE MESSAGE

Many regional manufacturers already have the skills, equipment, and processes that space companies need. Success comes from building readiness, validating quality, and connecting with the right buyers.

A PATHWAY INTO THE SUPPLY CHAIN

1 MAP CAPABILITIES



Identify existing strengths, equipment, certifications, and experience.

2 UPGRADE READINESS



Close gaps in quality systems, processes, and workforce skills.

3 VALIDATE QUALITY



Test, qualify, and certify capabilities to meet space industry standards.

4 CONNECT TO BUYERS



Engage primes and buyers, respond to opportunities, and deliver value.

CAPABILITIES SPACE COMPANIES NEED



PRECISION MACHINING

Tight-tolerance parts and complex geometries with high repeatability.



ELECTRONICS & HARNESSING

Cable assemblies, box builds, and electrical integration solutions.



COMPOSITES & MATERIALS

Advanced composites, adhesives, coatings, and specialty materials.



SOFTWARE & EMBEDDED SYSTEMS

Embedded software, controls, data systems, and device firmware.



TESTING SERVICES

Environmental, mechanical, and electrical testing and verification.



SYSTEMS INTEGRATION

Subassembly and system integration for space hardware and payloads.

WHAT BUYERS LOOK FOR



QUALITY SYSTEMS

Robust quality management and continuous improvement.



TRACEABILITY

Full material and process traceability from source to delivery.



PRECISION & RELIABILITY

Consistent accuracy, reliable performance, and low defect rates.



DOCUMENTATION

Clear procedures, records, and compliance documentation.



DELIVERY PERFORMANCE

On-time delivery, flexibility, and strong supply chain control.



CERTIFICATIONS & STANDARDS

Relevant industry certifications and adherence to space standards.

HOW ECONOMIC DEVELOPERS CAN HELP



SUPPLIER MAPPING

Identify local suppliers and match capabilities to space industry opportunities.



TRAINING SUPPORT

Provide training and upskilling in quality, processes, and standards.



SHARED FACILITIES

Offer access to shared equipment, labs, and test facilities.



BUYER INTRODUCTIONS

Connect manufacturers with primes, suppliers, and procurement teams.



CLUSTER EVENTS

Host events, fairs, and matchmaking to build relationships and visibility.



KEY TAKEAWAY

REGIONAL MANUFACTURERS CAN ENTER THE SPACE ECONOMY BY COMBINING EXISTING INDUSTRIAL STRENGTHS WITH QUALITY UPGRADES, VALIDATION, AND STRONG RELATIONSHIPS WITH PRIMES AND BUYERS. PREPARE. PROVE. CONNECT. DELIVER.

WHAT INFRASTRUCTURE SUPPORTS A REGIONAL SPACE ECONOMY CLUSTER?

THE PHYSICAL, DIGITAL, AND INSTITUTIONAL ASSETS THAT ENABLE GROWTH



MAIN POINT

Successful space economy clusters need more than launch facilities. A strong mix of physical, digital, and institutional infrastructure creates the foundation that enables companies to start, grow, and stay—often making the difference between potential and performance.

INFRASTRUCTURE STACK

1. PHYSICAL FACILITIES



SPACE TO BUILD

Laboratories, industrial space, test ranges, and support facilities.

2. DIGITAL CONNECTIVITY



DATA TO CONNECT

High-speed broadband, data centers, cloud, and cybersecurity.

3. TEST & OPERATIONS



TOOLS TO OPERATE

Test capabilities, ground stations, mission ops centers, and ranges.

4. ENABLING INSTITUTIONS



POLICY TO EMPOWER

Governance, funding, standards, workforce, and business support.

KEY INFRASTRUCTURE TYPES



LABS & CLEAN ROOMS

R&D labs, clean rooms, metrology, and materials facilities.



INDUSTRIAL SPACE

Flexible manufacturing space with power, utilities, and loading access.



BROADBAND & DATA CENTERS

High-capacity internet, edge computing, cloud, and secure data storage.



GROUND STATIONS & TRACKING

Uplink/downlink, telemetry, tracking, and network operations.



TRANSPORTATION & LOGISTICS

Road, air, and rail links, freight access, and supply chain infrastructure.



INCUBATORS & SHARED FACILITIES

Co-working, maker spaces, equipment libraries, and business support hubs.

HOW INFRASTRUCTURE ENABLES GROWTH



LOWERS BARRIERS TO ENTRY

Provides essential capabilities and reduces upfront costs for startups and SMEs.



SPEEDS PROTOTYPING

Easy access to labs, data, and test assets shortens development cycles and time to market.



ATTRACTS FIRMS & INVESTMENT

High-quality infrastructure signals readiness and draws companies and capital.



SUPPORTS COLLABORATION

Shared spaces and networks bring together talent, research, and businesses.



IMPROVES RESILIENCE

Diverse, robust infrastructure helps withstand disruptions and scale with demand.

REGIONAL PRIORITIES



INVEST WHERE GAPS BLOCK GROWTH

Focus on infrastructure that addresses the biggest constraints for local companies.



BUILD SHARED ASSETS

Create shared infrastructure that multiple companies can use.



PHASE DEVELOPMENT

Start with high-impact priorities and expand as demand and capabilities grow.



ALIGN WITH LOCAL STRENGTHS

Invest in infrastructure that amplifies regional advantages and sectors of opportunity.



CONNECT INFRASTRUCTURE TO CUSTOMERS

Ensure assets are easy to access and responsive to industry needs.



KEY TAKEAWAY

THE RIGHT INFRASTRUCTURE MIX—PHYSICAL, DIGITAL, OPERATIONAL, AND INSTITUTIONAL—GIVES REGIONS A COMPETITIVE EDGE. IT HELPS CONVERT TALENT AND IDEAS INTO SCALABLE, SUSTAINABLE SPACE ECONOMY ACTIVITY.

HOW DO SATELLITE DATA AND SERVICES SUPPORT REGIONAL DEVELOPMENT?

TURNING SPACE-ENABLED INFORMATION INTO BETTER LOCAL DECISIONS



BIG IDEA

Satellite data and services provide timely, consistent, and wide-area information that supports smarter planning, attracts investment, and improves public services by enhancing visibility and decision-making at the local and regional level.

DATA-TO-DECISION PATHWAY



HIGH-VALUE APPLICATIONS



LAND-USE PLANNING

Understand land use, zoning, and change to guide sustainable development.



INFRASTRUCTURE MANAGEMENT

Monitor roads, bridges, utilities, and public assets for maintenance and resilience.



EMERGENCY RESPONSE

Detect hazards, assess impacts, and coordinate rapid response.



NATURAL-RESOURCE MONITORING

Track forests, water, minerals, and fisheries to manage resources sustainably.



BUSINESS INTELLIGENCE

Identify markets, track activity, and support investment decisions.



ENVIRONMENTAL COMPLIANCE

Monitor emissions, land disturbance, and compliance with regulations.

OUTCOMES FOR REGIONS



SMARTER PLANNING

Better data leads to better plans and more resilient communities.



FASTER RESPONSE

Real-time insights reduce risks and improve emergency outcomes.



COST SAVINGS

Optimize resources, avoid waste, and lower operational costs.



NEW BUSINESSES

Data-driven insights unlock opportunities and attract new investment.



BETTER PUBLIC SERVICES

Stronger services improve quality of life and public trust.

HOW ECONOMIC DEVELOPERS CAN USE IT



MAP ASSETS

Visualize land, infrastructure, resources, and market potential across the region.



IDENTIFY SITES

Find optimal locations for investment, development, and public projects.



MONITOR GROWTH

Track change and performance to guide strategies and measure progress.



TARGET CLUSTERS

Spot emerging industries and support cluster development with data-driven insights.



SUPPORT INVESTORS

Provide credible data and insights to reduce risk and build investor confidence.



KEY TAKEAWAY

SATELLITE DATA BECOMES ECONOMIC VALUE WHEN IT IS TRANSLATED INTO LOCAL INSIGHTS, POLICY TOOLS, AND PRACTICAL SERVICES THAT HELP REGIONS PLAN, INVEST, AND DELIVER BETTER OUTCOMES.

HOW CAN EARTH OBSERVATION STRENGTHEN REGIONAL INDUSTRIES?

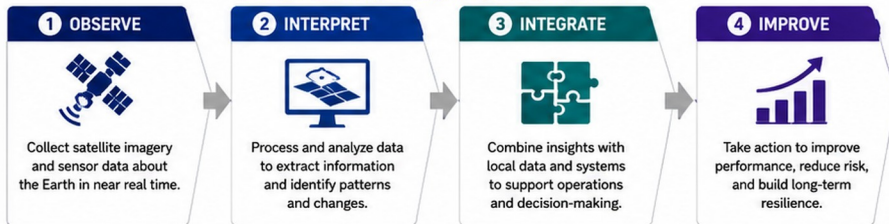
USING IMAGERY AND SENSOR DATA TO IMPROVE PERFORMANCE AND RESILIENCE



CORE VALUE

Earth observation turns imagery and sensor data into practical insights that help regional industries operate more efficiently, manage risk, and plan for a resilient future.

EARTH OBSERVATION IMPACT PATHWAY



INDUSTRIES SERVED



AGRICULTURE

Improve yields and resource efficiency with timely field insights.



FORESTRY

Monitor forest health, manage harvests, and detect risks like wildfires.



MINING

Optimize exploration, monitor sites, and manage environmental impacts.



ENERGY

Support site selection, operations, and infrastructure monitoring.



CONSTRUCTION & INFRASTRUCTURE

Track project progress, inspect assets, and plan maintenance proactively.



INSURANCE

Assess risk, validate claims, and support pricing with better data.

COMMON USE CASES



CROP MONITORING

Track crop health, soil moisture, and growth throughout the season.



ASSET INSPECTION

Identify damage, wear, or defects in infrastructure and facilities.



LAND-CHANGE DETECTION

Monitor deforestation, urban growth, and land-use changes over time.



DISASTER ASSESSMENT

Evaluate impacts quickly and support response and recovery.



RESOURCE MAPPING

Map minerals, water, biomass, and other natural resources more accurately.



ENVIRONMENTAL REPORTING

Track emissions, habitats, and compliance with environmental goals.

BENEFITS TO REGIONS



PRODUCTIVITY GAINS

Improve efficiency and output across operations and supply chains.



RISK REDUCTION

Anticipate threats and reduce financial and operational exposure.



BETTER COMPLIANCE

Meet regulations and reporting requirements with confidence.



STRONGER COMPETITIVENESS

Access new markets and win contracts with better data and insights.



INNOVATION SPILLOVERS

Spark new products, services, and jobs across the regional economy.



KEY TAKEAWAY

EARTH OBSERVATION CREATES LOCAL VALUE WHEN REGIONAL INDUSTRIES USE BETTER GEOSPATIAL INFORMATION TO MAKE FASTER AND SMARTER DECISIONS.

HOW CAN SATELLITE CONNECTIVITY EXPAND REGIONAL ECONOMIC OPPORTUNITY?

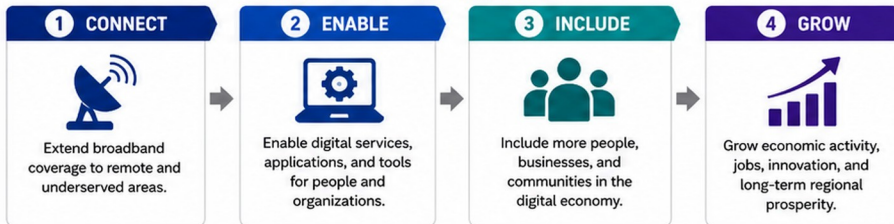
BROADBAND, RESILIENCE, AND ACCESS FOR COMMUNITIES AND INDUSTRIES



MAIN MESSAGE

Satellite connectivity delivers reliable, high-speed internet to places where terrestrial networks are limited, unreliable, or too costly—unlocking digital access, strengthening services, and enabling economic opportunity across every region.

CONNECTIVITY IMPACT PATHWAY



HIGH-IMPACT USES



REMOTE BUSINESS OPERATIONS

Support distributed teams, cloud tools, and reliable communications.



TELEHEALTH

Enable virtual care, remote monitoring, and health information access.



EDUCATION

Expand online learning, resources, and collaboration for students and teachers.



PUBLIC SAFETY

Strengthen emergency communications, monitoring, and situational awareness.



TRANSPORTATION & LOGISTICS

Improve tracking, routing, and coordination across supply chains.



SMART INFRASTRUCTURE

Power IoT, sensors, monitoring, and efficient asset management.

WHY IT MATTERS



DIGITAL INCLUSION

Connect people and communities who are otherwise left behind.



STRONGER SERVICES

Improve access and efficiency for health, education, safety, and government.



BUSINESS CONTINUITY

Maintain critical operations through outages, disasters, and disruptions.



WORKFORCE ACCESS

Open doors to remote work, skills training, and career opportunities.



RURAL COMPETITIVENESS

Attract investment, innovation, and growth in rural and remote regions.

WHERE ECONOMIC DEVELOPERS CAN ACT



IDENTIFY UNDERSERVED AREAS

Use data and local insight to map gaps and prioritize communities and sectors.



ALIGN PUBLIC INVESTMENTS

Coordinate funding and policies to extend connectivity and digital capacity.



ENGAGE PROVIDERS

Partner with satellite operators and integrators to design scalable solutions.



SUPPORT ANCHOR INSTITUTIONS

Leverage schools, hospitals, libraries, and local hubs to expand access.



PROMOTE ADOPTION

Build awareness, provide training, and reduce barriers to use.



KEY TAKEAWAY

SATELLITE CONNECTIVITY CAN WIDEN PARTICIPATION IN THE MODERN ECONOMY BY IMPROVING ACCESS, RESILIENCE, AND OPPORTUNITY ACROSS COMMUNITIES, INDUSTRIES, AND REGIONS.

WHAT WORKFORCE SKILLS DOES THE REGIONAL SPACE ECONOMY REQUIRE?

THE TALENT MIX BEHIND SPACE-ENABLED GROWTH



OVERVIEW

The regional space economy needs a broad talent base across technical, operational, digital, and business disciplines. It's more than aerospace engineers—it's the people who design, build, operate, and grow space-enabled solutions.

SKILL CATEGORIES

TECHNICAL



DESIGN & ENGINEER

Engineering, science, systems, and hardware expertise to build space systems.

DIGITAL



DATA & SOFTWARE

Software development, data analytics, AI/ML, cybersecurity, and digital solutions.

OPERATIONS



OPERATE & MAINTAIN

Mission operations, ground systems, logistics, maintenance, and service delivery.

BUSINESS & SUPPORT



MANAGE & ENABLE

Management, finance, legal, HR, marketing, procurement, and customer support.

KEY OCCUPATIONS



ENGINEERS & SCIENTISTS

Systems, aerospace, electrical, mechanical, materials, and research roles.



SOFTWARE & DATA SPECIALISTS

Develop, analyze, and manage software, data, and digital platforms.



SKILLED TRADES & TECHNICIANS

Assemble, test, install, and maintain equipment and infrastructure in the field.



MANUFACTURING & QUALITY STAFF

Production, machining, inspection, supply chain, and quality assurance professionals.



PROJECT & MISSION OPERATIONS

Plan, coordinate, and operate projects and missions from concept to delivery.



LEGAL & FINANCE PROFESSIONALS

Contracts, compliance, finance, risk, and commercial strategy expertise.

CROSS-CUTTING CAPABILITIES



SYSTEMS THINKING

Understand how components, people, and processes work together.



PROBLEM SOLVING

Analyze challenges and create effective, innovative solutions.



COMMUNICATION

Share ideas clearly across teams, stakeholders, and communities.



QUALITY CULTURE

Commit to safety, reliability, accuracy, and continuous improvement.



TEAMWORK

Collaborate across disciplines to deliver high-impact outcomes.

IMPLICATIONS FOR ECONOMIC DEVELOPERS



MAP DEMAND

Understand industry needs, emerging roles, and future skill gaps.



ALIGN TRAINING

Partner with schools and colleges to align programs with industry needs.



SUPPORT APPRENTICESHIPS

Grow hands-on pathways and earn-while-you-learn opportunities.



ATTRACT TALENT

Market careers, relocate workers, and retain local talent.



CONNECT EMPLOYERS & EDUCATORS

Build strong partnerships for internships, projects, and job placement.



KEY TAKEAWAY

A STRONG REGIONAL SPACE ECONOMY RELIES ON A DIVERSE WORKFORCE THAT COMBINES ADVANCED TECHNICAL SKILLS WITH PRACTICAL OPERATIONS, DIGITAL CAPABILITIES, AND BUSINESS SUPPORT TALENT. TOGETHER, THESE SKILLS DRIVE INNOVATION, RELIABILITY, AND GROWTH.

HOW CAN REGIONS BUILD A SPACE-READY TALENT PIPELINE?

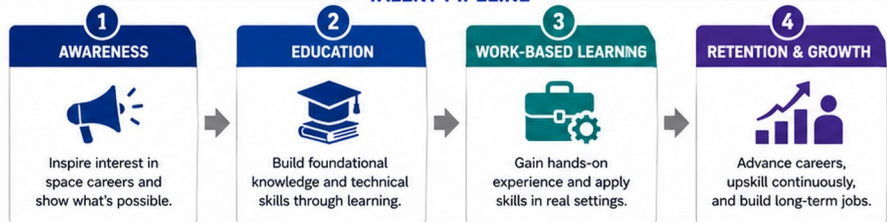
CONNECTING EDUCATION, TRAINING, AND EMPLOYER DEMAND



MAIN GOAL

Regions build stronger talent pipelines when education, training, and employers are aligned around real workforce needs.

TALENT PIPELINE



ESSENTIAL PARTNERS



SCHOOLS

Introduce students to space pathways early and build career awareness.



COLLEGES

Deliver hands-on training, certificates, and associate pathways.



UNIVERSITIES

Provide advanced degrees, research, and innovation opportunities.



EMPLOYERS

Share workforce needs, offer experience, and create quality jobs.



WORKFORCE AGENCIES

Connect people to training, resources, and employment services.



COMMUNITY ORGANIZATIONS

Expand access, remove barriers, and support diverse participation.

HIGH-IMPACT INITIATIVES



INTERNSHIPS

Short-term, hands-on experiences that build skills and professional networks.



APPRENTICESHIPS

Earn while you learn through structured training and on-the-job experience.



DUAL-CREDIT PROGRAMS

Earn college credit in high school and accelerate degree pathways.



RESKILLING PATHWAYS

Equip workers with new skills to move into in-demand space roles.



INDUSTRY-LED CURRICULUM

Co-designed courses that match employer needs and emerging technologies.

SUCCESS INDICATORS



PROGRAM ENROLLMENT

Growing numbers of participants entering programs.



COMPLETION RATES

Higher on-time completion and credential attainment.



PLACEMENTS

More graduates entering quality space-sector jobs.



EMPLOYER PARTICIPATION

Increasing employer engagement in training and hiring.



TALENT RETENTION

More workers stay, grow, and build careers in the region.



KEY TAKEAWAY

A SPACE-READY TALENT PIPELINE IS BUILT DELIBERATELY BY ALIGNING EDUCATION, TRAINING, AND EMPLOYERS. STRONG PARTNERSHIPS, PRACTICAL EXPERIENCE, AND CLEAR PATHWAYS CONNECT PEOPLE TO QUALITY JOBS AND SUSTAINABLE REGIONAL GROWTH.

HOW DO UNIVERSITIES AND RESEARCH INSTITUTIONS DRIVE SPACE-LED DEVELOPMENT?

RESEARCH, TALENT, TECHNOLOGY TRANSFER, AND CLUSTER FORMATION



CORE ROLE

Universities and research institutions anchor regional capability by producing talent, ideas, and partnerships that power innovation, companies, and long-term space-led economic growth.

IMPACT PATHWAY

1 RESEARCH



Investigate challenges and advance knowledge in space science, engineering, and policy.



2 DISCOVERY



Generate new ideas, technologies, and solutions with potential real-world impact.



3 COMMERCIALIZATION



Translate discoveries into products, services, and companies through technology transfer.



4 REGIONAL GROWTH



Create jobs, attract investment, and strengthen the region's space economy ecosystem.

HOW INSTITUTIONS CONTRIBUTE



TALENT DEVELOPMENT

Educate and train students with specialized space skills and expertise.



R&D

Conduct cutting-edge research to solve space-related challenges and advance knowledge.



LABS AND FACILITIES

Provide infrastructure and testbeds for experimentation, prototyping, and validation.



TECHNOLOGY TRANSFER

Move innovations from research into industry through licensing, IP, and collaboration.



INDUSTRY PARTNERSHIPS

Work with companies on joint projects, contract research, and workforce development.



STARTUP FORMATION

Incubate ideas and support new space ventures.

WHY IT MATTERS FOR REGIONS



ATTRACTS FIRMS

Strong research ecosystems draw companies seeking talent, ideas, and collaboration.



SUPPORTS INNOVATION

Continuous discovery and experimentation fuel new solutions and competitive advantages.



BUILDS REPUTATION

Recognized institutions enhance regional visibility and global standing in the space sector.



ANCHORS CLUSTERS

Institutions act as hubs that connect firms, investors, and government partners.



CREATES SPILLOVERS

Knowledge, talent, and technologies spread across the economy, lifting many sectors.

ACTIONS FOR ECONOMIC DEVELOPERS



CONNECT RESEARCHERS AND FIRMS

Facilitate relationships through events, matchmaking, and collaborative projects.



SUPPORT PROOF-OF-CONCEPT PROGRAMS

Fund early-stage validation to bridge the gap between research and market.



PROMOTE SHARED FACILITIES

Invest in and connect shared labs, testbeds, and data resources for broad access.



STRENGTHEN TECH TRANSFER CAPACITY

Support IP management, licensing expertise, and industry-focused innovation offices.



BACK UNIVERSITY SPINOUTS

Provide funding, mentorship, and networks for academic startup success.



KEY TAKEAWAY

STRONG RESEARCH INSTITUTIONS ARE ENGINE ROOMS FOR REGIONAL PROSPERITY. THEY HELP REGIONS GENERATE IDEAS, DEVELOP TALENT, AND LAUNCH VENTURES THAT CAN POWER LONG-TERM SPACE ECONOMY GROWTH.

HOW CAN ENTREPRENEURSHIP ACCELERATE A REGIONAL SPACE ECONOMY?

STARTUPS, SCALEUPS, AND ECOSYSTEM SUPPORT FOR NEW GROWTH



MAIN MESSAGE

Entrepreneurship helps regions turn ideas, talent, and technology into new firms and scalable markets that drive jobs, investment, and long-term growth.

STARTUP GROWTH CYCLE



WHAT STARTUPS NEED



CAPITAL

Access to seed, venture, and growth capital at every stage.



MENTORS

Experienced mentors and advisors who guide and open doors.



CUSTOMERS

Early customers and partners to validate and accelerate traction.



SKILLED TALENT

Access to technical, business, and operational talent to build and scale.



SHARED FACILITIES

Labs, testbeds, clean rooms, and equipment to prototype and iterate.



SUPPORTIVE POLICIES

Policies and regulations that enable innovation and reduce barriers.

WHY ENTREPRENEURSHIP MATTERS



CREATES FIRMS

Turns ideas into new companies and quality jobs.



ATTRACTS INVESTMENT

Draws private investment and increases regional capital flows.



COMMERCIALIZES RESEARCH

Brings research and IP to market and drives real-world impact.



DIVERSIFIES CLUSTERS

Builds new sectors and reduces dependence on single industries.



BOOSTS INNOVATION

Encourages experimentation and continuous improvement.

HOW REGIONS CAN SUPPORT STARTUPS



INCUBATORS & ACCELERATORS

Programs that provide structure, mentorship, and go-to-market support.



SEED FUNDING

Early-stage grants and investments to reduce risk and spark traction.



PROCUREMENT PATHWAYS

Access to testing, pilots, and public procurement to open first markets.



FOUNDER NETWORKS

Peer communities and events that connect founders, investors, and experts.



DEMONSTRATION OPPORTUNITIES

Testbeds, ranges, and missions to prove capability in real environments.



KEY TAKEAWAY

ENTREPRENEURSHIP ACCELERATES THE REGIONAL SPACE ECONOMY WHEN FOUNDERS CAN ACCESS CAPITAL, TALENT, CUSTOMERS, AND A COORDINATED SUPPORT ECOSYSTEM.

HOW IS SPACE ECONOMY INNOVATION FINANCED?

CAPITAL SOURCES, FUNDING PATHWAYS, AND REGIONAL FINANCE STRATEGIES



FUNDING LANDSCAPE

Space economy innovation usually requires different capital sources at different stages. Regions grow faster when they connect entrepreneurs and firms to the right mix of public and private funding.

INNOVATION FINANCING PATHWAY –

1 IDEA & RESEARCH



Grants, university support, and early research funding help turn ideas into concepts.

2 VALIDATE



Proof-of-concept funds, angel capital, and pilot support validate solutions and markets.

3 SCALE



Venture capital, loans, and growth finance fuel scaling and market expansion.

4 EXPAND



Export finance, project finance, and strategic investment enable global growth and impact.

MAJOR SOURCES OF CAPITAL



GRANTS

Non-dilutive funding from governments, foundations, and research programs.



ANGEL & SEED

Early-stage capital from angels and seed investors who back teams and ideas.



VENTURE CAPITAL

Equity investment to scale innovative companies and capture high-growth opportunities.



CORPORATE INVESTMENT

Strategic investment from companies seeking technology, talent, and market access.



LOANS & DEBT

Debt financing from banks and lenders to support equipment, working capital, and growth.



PUBLIC-PRIVATE PARTNERSHIPS

Collaborative funding to share risk and drive innovation at scale.

WHAT FUNDERS LOOK FOR



MARKET NEED

Clear problem solved, strong customer need, and market potential.



TEAM STRENGTH

Experienced, complementary team with the ability to execute.



TECHNICAL PROOF

Validated technology or IP with demonstrated performance and reliability.



COMMERCIAL TRACTION

Early customers, revenue progress, or pilots showing market acceptance.



SCALABLE ADVANTAGE

Defensible edge that can scale across markets and geographies.

HOW REGIONS CAN IMPROVE ACCESS TO CAPITAL



PROOF-OF-CONCEPT FUNDS

Provide early grants to validate ideas and reduce technical risk.



INVESTOR NETWORKS

Connect founders with local, national, and global investors and mentors.



GRANT SUPPORT

Simplify access to grants and guide applicants through the process.



PROCUREMENT PILOTS

Use public procurement and living labs to create early markets and references.



EXPORT READINESS

Support companies with market entry, compliance, and export financing.



KEY TAKEAWAY

REGIONAL SPACE ECONOMY GROWTH IS EASIER WHEN INNOVATORS CAN MOVE FROM IDEA TO SCALE THROUGH A VISIBLE, WELL-CONNECTED FINANCING ECOSYSTEM.

HOW CAN A REGION ATTRACT SPACE COMPANIES AND INVESTMENT?

BUILDING A COMPELLING VALUE PROPOSITION FOR GROWTH



ATTRACTION PRINCIPLE

Companies and investors choose regions that combine talent, infrastructure, partnerships, and a clear value proposition with low friction and visible opportunity.

SITE SELECTION DECISION FRAMEWORK

1 DEFINE VALUE



Identify regional strengths and target firms that match your assets.

2 BUILD READINESS



Prepare sites, infrastructure, workforce, and policies to meet company needs.

3 ENGAGE PROSPECTS



Conduct outreach, market the region, and build relationships with prospects.

4 CLOSE & SUPPORT



Offer incentives, provide concierge assistance, and deliver aftercare.

WHAT COMPANIES EVALUATE



TALENT

Skilled, available workforce with space and STEM expertise.



INFRASTRUCTURE

Reliable transport, utilities, digital connectivity, and technical facilities.



OPERATING COSTS

Competitive costs for labor, real estate, utilities, and doing business.



INCENTIVES

Financial incentives, tax benefits, and performance-based programs.



CUSTOMER ACCESS

Proximity to customers, suppliers, and global markets.



QUALITY OF LIFE

Safe communities, housing, schools, and lifestyle amenities.

WHAT ATTRACTS INVESTMENT



CREDIBLE PIPELINE

Visible projects and opportunities that demonstrate real momentum.



ANCHOR INSTITUTIONS

Universities, labs, and organizations that drive innovation and credibility.



AVAILABLE SITES

Shovel-ready sites with clear zoning, utilities, and room to grow.



STRONG PARTNERSHIPS

Public-private collaboration that mobilizes resources and expertise.



POLICY STABILITY

Predictable policies, transparent rules, and long-term consistency.

REGIONAL ATTRACTION TOOLS



SECTOR MARKETING

Targeted campaigns that showcase strengths and success stories.



INVESTOR RELATIONS

Engage investors, funds, and partners with consistent communications.



BUSINESS CONCIERGE

One-stop support that helps companies navigate and get results.



CLUSTER EVENTS

Conferences, meetings, and roundtables to build connections and share insights.



FAST PERMITTING

Streamlined reviews and clear timelines to reduce delays and uncertainty.



KEY TAKEAWAY

REGIONS ATTRACT SPACE COMPANIES AND CAPITAL WHEN THEY MAKE GROWTH EASIER, FASTER, AND MORE PREDICTABLE THAN COMPETING LOCATIONS.

HOW CAN PUBLIC PROCUREMENT STIMULATE REGIONAL SPACE MARKETS?

USING GOVERNMENT DEMAND TO CREATE EARLY CUSTOMERS AND GROWTH



PROCUREMENT ROLE

Government can help grow space markets by becoming an early buyer of useful services, validating local firms, and creating predictable demand that attracts investment and talent.

PUBLIC PROCUREMENT MARKET PATHWAY

1 IDENTIFY NEEDS



Define public problems and mission needs that space solutions can solve.

2 PILOT SOLUTIONS



Run demonstrations, trials, and challenge programs to test solutions.

3 AWARD CONTRACTS



Purchase and award contracts to qualified providers, validating them.

4 SCALE ADOPTION



Expand to broader deployment and create recurring demand.

WHERE PROCUREMENT CAN CREATE DEMAND



EARTH OBSERVATION

Monitor land, water, and infrastructure to support planning and decisions.



CONNECTIVITY

Provide reliable communications for communities and critical operations.



EMERGENCY RESPONSE

Deliver real-time data and rapid support during disasters.



INFRASTRUCTURE MONITORING

Track assets and detect issues before they become costly failures.



ENVIRONMENTAL SERVICES

Support climate, water, and natural resource management with space data.



PUBLIC SAFETY

Enhance situational awareness and protect people and property.

WHY PROCUREMENT MATTERS



FIRST CUSTOMER

Government buys early, helping firms prove solutions and build track records.



REVENUE STABILITY

Contracts provide predictable revenue that supports hiring and investment.



MARKET SIGNAL

Public demand signals priority needs and attracts private investment.



PRODUCT VALIDATION

Real-world use validates performance and builds buyer confidence.



LOCAL CAPABILITY

Stronger firms and jobs grow local space expertise and ecosystems.

GOOD PROCUREMENT PRACTICES



SMALL-BUSINESS ACCESS

Lower barriers and clear pathways help local small firms compete.



OUTCOME-BASED SPECS

Focus on results, not specific technologies or vendors.



FASTER PILOTS

Use pilots and challenges to test ideas quickly and learn early.



INTERAGENCY COORDINATION

Align agencies to share needs, data, and procurement opportunities.



LONGER-TERM DEMAND

Use multi-year contracts to support scale, planning, and market growth.



KEY TAKEAWAY

PUBLIC PROCUREMENT CAN ACCELERATE REGIONAL SPACE MARKETS WHEN IT TURNS LOCAL PROBLEMS INTO REAL PURCHASING OPPORTUNITIES FOR INNOVATIVE FIRMS.

HOW CAN REGIONS BUILD STRONG SPACE ECONOMY PARTNERSHIPS?

CONNECTING STAKEHOLDERS TO SOLVE PROBLEMS AND CREATE OPPORTUNITY



PARTNERSHIP LOGIC

Regional space economy growth depends on partnerships among business, government, universities, investors, and communities, because no single actor can build the ecosystem alone.

PARTNERSHIP BUILDING CYCLE

1 MAP STAKEHOLDERS



Identify who matters across sectors and geographies.



2 ALIGN GOALS



Establish shared priorities and value to pursue.



3 LAUNCH PROJECTS



Start pilots, programs, and working groups to create impact.



4 SUSTAIN NETWORKS



Strengthen governance, trust, and long-term collaboration.

ESSENTIAL PARTNERS



GOVERNMENTS

Set policy, invest in infrastructure, and enable collaboration.



COMPANIES

Drive innovation, create jobs, and bring market needs.



UNIVERSITIES

Develop talent, advance research, and test ideas.



INVESTORS

Provide capital, expertise, and patient support.



WORKFORCE AGENCIES

Build skills, connect talent, and support careers.



COMMUNITY ORGANIZATIONS

Represent needs, build trust, and strengthen inclusion.

PARTNERSHIP OUTCOMES



SHARED ASSETS

Combine facilities, data, and resources to do more together.



BETTER STRATEGY

Leverage diverse insights to make smarter decisions.



TALENT PIPELINES

Align education, training, and jobs with industry needs.



STRONGER BIDS

Team up to compete for grants, contracts, and investments.



FASTER INNOVATION

Accelerate ideas from concept to market and scale.

HOW ECONOMIC DEVELOPERS CAN CONVEY



ROUNDTABLES

Host regular dialogues to build relationships and surface priorities.



CLUSTER ORGANIZATIONS

Create or support clusters that connect and coordinate members.



MEMORANDA OF UNDERSTANDING

Formalize shared intent and define collaboration commitments.



JOINT MARKETING

Promote the region as a unified brand to attract partners and investment.



SHARED DATA

Build common data platforms to inform action and track progress.



KEY TAKEAWAY

STRONGER REGIONAL PARTNERSHIPS TURN DISCONNECTED ASSETS INTO COORDINATED ACTION, SHARED MOMENTUM, AND MORE DURABLE SPACE ECONOMY GROWTH.

HOW DO SPACE ECONOMY CLUSTERS FORM AND GROW?

FROM ISOLATED ASSETS TO SPECIALIZED ECOSYSTEMS



CLUSTER DYNAMICS

Clusters emerge when firms, talent, infrastructure, and institutions reinforce each other over time, creating specialization and regional advantage.

CLUSTER GROWTH PATHWAY

1 ASSETS



Initial companies, labs, and infrastructure establish a foundation.



2 NETWORKS



Relationships and collaboration deepen knowledge and trust.



3 SPECIALIZATION



Supplier depth and market focus drive efficiency and quality.



4 SCALE



Investment, exports, and reputation accelerate growth and resilience.

INGREDIENTS OF A CLUSTER



ANCHOR FIRMS

Established firms create demand, stability, and spillover benefits.



SUPPLIERS

Local suppliers provide components, services, and specialized inputs.



TALENT

Skilled people power innovation, operations, and entrepreneurship.



RESEARCH

Universities and labs generate knowledge and support innovation.



CAPITAL

Financing fuels growth, innovation, and commercial expansion.



INFRASTRUCTURE

Facilities, testbeds, and connectivity enable performance and scale.

SIGNS A CLUSTER IS GROWING



NEW STARTUPS

More startups emerge, signaling opportunity and ecosystem vitality.



CONTRACT WINS

Larger and more contracts show market traction and capability.



JOB GROWTH

Employment rises across technical, professional, and support roles.



EXPORT ACTIVITY

Products and services reach global markets, driving revenue and resilience.



REINVESTMENT

Earnings and capital are reinvested in people, facilities, and innovation.

HOW REGIONS CAN ACCELERATE CLUSTERS



SUPPORT NETWORKS

Connect firms, talent, investors, and partners to build relationships and opportunities.



SHARED FACILITIES

Provide access to testbeds, equipment, and spaces that lower costs and risks.



SUPPLIER DEVELOPMENT

Help local suppliers upgrade capabilities and meet industry standards.



CLUSTER BRANDING

Promote strengths and successes to attract customers, talent, and investment.



ECOSYSTEM LEADERSHIP

Coordinate efforts, set priorities, and sustain momentum over the long term.



KEY TAKEAWAY

CLUSTERS GROW WHEN REGIONAL ASSETS BECOME CONNECTED, SPECIALIZED, AND VISIBLE TO CUSTOMERS, INVESTORS, AND TALENT.

HOW CAN SMALLER AND RURAL REGIONS PARTICIPATE IN THE SPACE ECONOMY?

FINDING WINNABLE NICHE OUTSIDE MAJOR METRO HUBS



RURAL OPPORTUNITY

Smaller and rural regions can participate successfully in the space economy by focusing on local strengths, clear market niches, and partnerships with larger ecosystems.

RURAL PARTICIPATION PATHWAY

1 IDENTIFY NICHE



Identify realistic roles and align them with market needs.

2 LEVERAGE PLACE ASSETS



Leverage land, existing industries, and community strengths.

3 CONNECT TO MARKETS



Build partnerships and plug into supply chains and customer networks.

4 GROW LOCALLY



Grow jobs, services, and new firms for lasting impact.

REALISTIC ROLES FOR SMALLER REGIONS



GROUND INFRASTRUCTURE

Provide sites, power, and communications for space operations.



REMOTE SENSING SERVICES

Collect, process, and deliver data for local and global users.



AGRICULTURE & RESOURCES

Use space data to improve farming, forestry, and resource management.



SPECIALIZED MANUFACTURING

Build parts, subsystems, and components for space systems.



SATELLITE CONNECTIVITY

Provide backhaul and connectivity for remote operations and communities.

NATURAL ADVANTAGES



LAND & AIRSPACE

Abundant space for testing, launches, and antennas.



LOWER COSTS

Lower land, labor, and operating costs increase competitiveness.



RESOURCE INDUSTRIES

Existing sectors provide materials, skills, and industrial capacity.



REMOTE COMMUNITY NEEDS

Space solutions address critical connectivity and service gaps.



COMMUNITY COHESION

Strong local networks support collaboration and long-term commitment.

HOW TO COMPETE EFFECTIVELY



FOCUS ON NICHE

Choose a few clear niches where you can be the best.



BUILD PARTNERSHIPS

Partner with firms, universities, and governments.



UPGRADE DIGITAL INFRASTRUCTURE

Invest in broadband, power, and digital platforms.



USE SPACE DATA

Apply space data to solve local problems and create value.



LINK TO METRO ECOSYSTEMS

Connect to metro hubs for customers, capital, and talent.



KEY TAKEAWAY

SMALLER AND RURAL REGIONS DO NOT NEED TO DO EVERYTHING—THEY NEED TO OWN A FEW VALUABLE ROLES AND CONNECT THEM TO LARGER SPACE MARKETS.

WHAT POLICIES CAN SUPPORT REGIONAL SPACE ECONOMY DEVELOPMENT?

USING PUBLIC POLICY TO ENABLE COMPETITIVENESS, CAPACITY, AND GROWTH



POLICY ROLE

Good policy reduces barriers, aligns resources, and helps regions build the talent, infrastructure, and market conditions needed for space economy growth.

POLICY SUPPORT FRAMEWORK

1 SET GOALS



Define clear regional priorities and measurable objectives.

2 ENABLE INVESTMENT



Use incentives and infrastructure to mobilize capital and resources.

3 SUPPORT FIRMS & TALENT



Invest in workforce, research, and business support to strengthen capabilities.

4 EVALUATE OUTCOMES



Measure results, learn what works, and adjust policies over time.

COMMON POLICY TOOLS



INCENTIVES

Tax credits, grants, and rebates to encourage investment and innovation.



WORKFORCE PROGRAMS

Training, apprenticeships, and upskilling to build and retain talent.



RESEARCH SUPPORT

Funding and partnerships to advance R&D and technology.



INFRASTRUCTURE FUNDING

Invest in facilities, testbeds, broadband, and logistics infrastructure.



PUBLIC PROCUREMENT

Use buyer power to create demand and support local innovation.



REGULATORY COORDINATION

Streamline rules and align regulations across agencies and jurisdictions.

WHAT GOOD POLICY DOES



LOWERS RISK

Reduces uncertainty and the cost of doing business.



SPEEDS GROWTH

Helps firms move faster from idea to market and scale.



ATTRACTS FIRMS

Makes regions more competitive for business location and expansion.



BUILDS CAPACITY

Strengthens talent, institutions, and innovation ecosystems.



SUPPORTS INCLUSION

Expands access to opportunities for diverse communities and regions.

POLICY DESIGN PRINCIPLES



CLARITY

Clear goals, eligibility, and processes that are easy to understand.



PREDICTABILITY

Consistent and stable policies that build confidence over time.



LOCAL FIT

Policies tailored to regional strengths, needs, and context.



LONG-TERM FOCUS

Sustained commitment that supports long-term investment and outcomes.



ACCOUNTABILITY

Transparent metrics and reporting to ensure results and public value.



KEY TAKEAWAY

EFFECTIVE POLICY DOES NOT REPLACE MARKETS—IT IMPROVES THE CONDITIONS THAT HELP SPACE ECONOMY FIRMS, WORKERS, AND INSTITUTIONS SUCCEED REGIONALLY.

HOW CAN A REGION CREATE A SPACE ECONOMY DEVELOPMENT STRATEGY?

ASSESSING ASSETS, CHOOSING PRIORITIES, AND ORGANIZING ACTION



STRATEGY PURPOSE

A regional strategy helps leaders choose where to compete, organize partners, and focus resources on the highest-value opportunities.

STRATEGY DEVELOPMENT PROCESS

1 ASSESS ASSETS



Map strengths, capabilities, resources, and gaps across the regional ecosystem.



2 CHOOSE PRIORITIES



Evaluate markets and opportunities to select target sectors and focus areas.



3 BUILD ROADMAP



Design initiatives, secure funding, and set milestones and timelines.



4 GOVERN IMPLEMENTATION



Establish leadership, assign roles, and drive accountability and results.

CORE STRATEGY ELEMENTS



ASSET MAPPING

Identify strengths, capabilities, assets, and infrastructure across the region.



MARKET FOCUS

Define target markets and value propositions for the region.



STAKEHOLDER ENGAGEMENT

Involve industry, academia, government, and communities in strategy design.



INITIATIVES

Select high-impact initiatives that advance priorities and create value.



FUNDING MODEL

Identify funding sources and design a sustainable investment model.



GOVERNANCE

Establish decision structures, policies, and coordination mechanisms.

QUESTIONS LEADERS MUST ANSWER



WHERE CAN WE WIN?

What unique strengths and advantages can we leverage?



WHO ARE THE CUSTOMERS?

Which customers and end users will create the most value?



WHAT GAPS EXIST?

What capabilities, infrastructure, or resources are missing?



WHO LEADS?

Who will drive implementation and coordinate partners?



HOW WILL SUCCESS BE MEASURED?

What metrics will track progress and demonstrate impact?

COMMON STRATEGY OUTPUTS



VISION

A clear, inspiring vision for the region's space economy future.



TARGET SECTORS

Prioritized sectors and markets to focus resources and efforts.



ACTION PORTFOLIO

A portfolio of initiatives with goals, owners, resources, and expected outcomes.



PARTNER ROLES

Defined roles and commitments for key partners and organizations.



TIMELINE

Phased milestones and timelines to guide implementation and track progress.



KEY TAKEAWAY

A STRONG STRATEGY CONVERTS BROAD AMBITION INTO CLEAR PRIORITIES, COORDINATED ACTIONS, AND A REALISTIC PATH FOR REGIONAL SPACE ECONOMY GROWTH.

WHAT SHOULD A REGIONAL SPACE ECONOMY ACTION PLAN INCLUDE?

TURNING STRATEGY INTO PRIORITIES, PROJECTS, AND IMPLEMENTATION



ACTION PLAN ROLE

An action plan translates strategy into specific initiatives, assigns responsibilities, sets timelines, and defines near-term steps that partners can actually implement.

ACTION PLAN CYCLE

1 SET GOALS



Define clear outcomes and focus areas that align with regional strengths.

2 LAUNCH ACTIONS



Initiate priority projects and programs that advance goals and create momentum.

3 COORDINATE DELIVERY



Align partners, budgets, and ownership to ensure effective implementation.

4 TRACK PROGRESS



Monitor performance with metrics and updates, and adjust based on results.

WHAT TO INCLUDE



BUSINESS RETENTION

Support existing firms to grow, innovate, and remain in the region.



SUPPLIER DEVELOPMENT

Strengthen local suppliers and integrate them into supply chains.



WORKFORCE PROJECTS

Build talent through training, education, and career pathways in space fields.



INFRASTRUCTURE

Invest in facilities, connectivity, and systems that enable space activities.



INVESTMENT ATTRACTION

Market the region, engage investors, and secure funding for growth.



POLICY ACTIONS

Advocate for policies that remove barriers and create a pro-growth environment.

FEATURES OF A GOOD ACTION PLAN



OWNERS

Clear lead organizations and roles for each action.



TIMELINES

Realistic schedules with milestones and near-term deadlines.



BUDGETS

Estimated costs and funding sources for each action.



PERFORMANCE METRICS

Measurable indicators to track progress and outcomes over time.



PARTNERSHIPS

Defined partners and commitments to collaborate and deliver.

NEAR-TERM PRIORITIES



QUICK WINS

Identify fast, visible wins that deliver value and build early momentum.



CLUSTER CONVENING

Bring stakeholders together to align priorities and drive collaboration.



MARKET RESEARCH

Gather data and insights to guide decisions and opportunities.



PILOT PROJECTS

Test ideas on a small scale to learn, adapt, and demonstrate impact.



COMMUNICATIONS

Share progress and successes to engage communities and attract interest.



KEY TAKEAWAY

A STRONG ACTION PLAN MAKES REGIONAL SPACE ECONOMY DEVELOPMENT OPERATIONAL BY CLARIFYING WHO WILL DO WHAT, WHEN, AND WITH WHICH RESOURCES.

HOW SHOULD REGIONAL SPACE ECONOMY SUCCESS BE MEASURED?

USING METRICS TO TRACK PROGRESS, LEARN, AND IMPROVE RESULTS



MEASUREMENT PURPOSE

Regions need clear performance measures to understand what is working, justify investment, compare progress, and improve their space economy strategy over time.

MEASUREMENT FRAMEWORK

1 DEFINE METRICS



Choose the right indicators and set clear baselines aligned with goals.

2 COLLECT DATA



Gather reliable data from trusted sources and use dashboards to track it.

3 REVIEW PERFORMANCE



Analyze results regularly to assess progress and learn with partners.

4 ADJUST STRATEGY



Adapt actions and invest where results show the greatest impact.

KEY METRICS TO TRACK



JOBS & WAGES

Track the number of space-related jobs and wage growth in the region.



FIRMS & STARTUPS

Measure the number of companies, startups, and business survival and growth.



INVESTMENT

Monitor public and private investment flows into the regional space economy.



CONTRACTS & EXPORTS

Track government and commercial contracts and exports of space products and services.



RESEARCH & IP

Measure R&D activity, publications, patents, and technology advancements.



TALENT & TRAINING

Track skilled talent supply, training completions, and workforce growth.

WHY MEASUREMENT MATTERS



ACCOUNTABILITY

Demonstrates stewardship of public and private resources.



LEARNING

Reveals what is working, what is not, and where to focus improvement.



FUNDING JUSTIFICATION

Provides evidence of impact to secure continued and new investment.



BENCHMARKING

Enables comparison to peers and best practices locally and globally.



GAP IDENTIFICATION

Highlights gaps and opportunities to guide strategy and resource allocation.

BUILDING A PRACTICAL SCORECARD



BASELINES

Establish current state baselines for all key metrics and goals.



LEADING INDICATORS

Track early signals that predict future outcomes and inform decisions.



LAGGING INDICATORS

Measure results that confirm impact and track performance over time.



ANNUAL REVIEW

Review results annually with partners and refine goals and actions.



PUBLIC REPORTING

Share results transparently to build trust and drive accountability.



KEY TAKEAWAY

REGIONAL SUCCESS IS MEASURED BEST WITH A BALANCED SCORECARD THAT CONNECTS STRATEGY, IMPLEMENTATION, AND OUTCOMES IN A CLEAR, REPEATABLE WAY.

HOW MATURE IS YOUR REGIONAL SPACE ECONOMY?

A PRACTICAL FRAMEWORK TO ASSESS AND ADVANCE YOUR SPACE ECOSYSTEM



MATURITY IDEA

Maturity reflects the depth, diversity, and resilience of a region's space ecosystem—it's people, companies, infrastructure, capital, markets, and institutions—and how well these elements connect to create sustainable economic value.

MATURITY FRAMEWORK: FOUR STAGES

1 EMERGING



Early activity and awareness. Foundational assets in place; limited coordination and commercial scale.

2 DEVELOPING



Growing firms and talent. Initial infrastructure and programs. Early revenue and market traction.

3 ESTABLISHED



Diverse companies and customers. Robust talent pipeline, partners, and investment. Sustained growth.

4 LEADING



Global presence and influence. High-value innovation, exports, and resilient ecosystem.

WHAT TO ASSESS: SIGNS OF MATURITY



COMPANIES & ENTREPRENEURSHIP

Number, diversity, and growth of space companies; startups, scale-ups, and suppliers.



TALENT & WORKFORCE

Availability and quality of skilled people; education and training pathways.



INFRASTRUCTURE & FACILITIES

Access to test facilities, labs, manufacturing, data, and reliable connectivity.



RESEARCH & INNOVATION

Universities, R&D strength, patents, technology transfer, and innovation capacity.



CAPITAL & INVESTMENT

Availability of public funding, private capital, and catalytic programs.



MARKETS & COMMERCIAL ACTIVITY

Customer base, contracts, exports, and value added from space-enabled solutions.

WHY MATURITY MATTERS



STRONGER RESILIENCE

A mature ecosystem adapts to change and external shocks more effectively.



HIGHER ECONOMIC IMPACT

Deeper value chains create jobs, drive incomes, and expand tax base.



GREATER COMPETITIVENESS

Regions can win larger contracts, attract investment, and access global markets.



FASTER INNOVATION

Collaboration and knowledge flow speed the pace of new solutions.



INCLUSIVE GROWTH

Broad participation strengthens communities and builds opportunity.

HOW REGIONS CAN ADVANCE



DEFINE A CLEAR SPACE STRATEGY

Set priorities, focus areas, and measurable goals aligned to regional strengths.



BUILD PARTNERSHIPS

Connect industry, universities, government, and community stakeholders.



DEVELOP TALENT

Invest in education, training, and attraction to grow and retain a skilled workforce.



INVEST IN ENABLERS

Strengthen facilities, data, connectivity, and supportive policies and procurement.



MEASURE & ADAPT

Track key indicators, benchmark progress, and refine actions regularly.



KEY TAKEAWAY

UNDERSTAND WHERE YOUR REGION STANDS, FOCUS ON THE RIGHT LEVERS, AND TAKE CONSISTENT ACTION TO BUILD A THRIVING, COMPETITIVE, AND INNOVATIVE SPACE ECONOMY.

HOW CAN REGIONS CHOOSE THE RIGHT SPACE ECONOMY SPECIALIZATION?

A PRACTICAL FRAMEWORK TO FOCUS INVESTMENT, BUILD COMPETITIVE ADVANTAGE, AND DRIVE GROWTH



SPECIALIZATION IDEA

A space economy specialization is a focused area of strength where a region can build unique capabilities, serve real markets, and outperform peers. Choosing the right one aligns local assets with opportunity to create durable jobs, innovation, and value.

FOUR-STEP FRAMEWORK: CHOOSE WITH CONFIDENCE

1 ASSESS ASSETS



Map regional strengths: talent, industry, research, infrastructure, capital, and existing capabilities.

2 ANALYZE OPPORTUNITIES



Evaluate market size, growth, trends, customer needs, and barriers to entry in target space sectors.

3 MATCH & PRIORITIZE



Match assets to opportunities, identify best-fit areas, and prioritize 1–2 specializations.

4 COMMIT & EXECUTE



Align stakeholders, invest with focus, measure progress, and adapt over time.

WHAT TO EVALUATE: KEY FACTORS



INDUSTRY BASE

Existing companies and supply chains that provide a foundation and commercial experience.



TALENT & WORKFORCE

Depth of skilled workers, universities, training programs, and ability to attract and retain talent.



RESEARCH & IP

Universities, labs, patents, test facilities, and innovation capacity in relevant space technologies.



INFRASTRUCTURE

Test ranges, clean rooms, data centers, manufacturing space, broadband, and logistics.



CUSTOMERS & DEMAND

Proximity to anchor customers, end markets, and government or commercial buyers.



COMPETITION & DIFFERENTIATION

Strength of other regions and your ability to offer unique value.

WHAT A STRONG SPECIALIZATION DELIVERS



CLEAR IDENTITY

Recognized for a definitive area of expertise.



HIGHER VALUE

Access to better markets, customers, and partnerships.



EFFICIENT INVESTMENT

Resources target where they create the greatest impact.



STRONGER CLUSTERS

Deeper collaboration, innovation, and supply chain resilience.



TALENT MAGNET

Attracts skilled people and entrepreneurs seeking focus.



SUSTAINABLE GROWTH

Builds long-term advantages and economic resilience.

HOW REGIONS CAN STRENGTHEN THEIR SPECIALIZATION



BUILD A ROADMAP

Define goals, critical projects, metrics, and timelines.



CONVENE PARTNERS

Align government, industry, academia, Indigenous partners, and investors.



INVEST STRATEGICALLY

Fund capabilities, shared infrastructure, and high-potential companies.



SUPPORT COMPANIES

Provide programs for R&D, commercialization, access to capital, and go-to-market.



CONNECT GLOBALLY

Build export pathways, join networks, and attract international partners.



MEASURE & ADAPT

Track outcomes, learn, and refine strategy as markets evolve.



KEY TAKEAWAY

CHOOSE THE SPACE ECONOMY SPECIALIZATION WHERE YOUR REGION CAN WIN. BE RIGOROUS, FOCUS YOUR EFFORTS, AND EXECUTE TO BUILD LASTING COMPETITIVE ADVANTAGE AND PROSPERITY.

WHAT IS A REGIONAL SPACE ECONOMY COMPETITIVE ADVANTAGE?

IT'S NOT JUST WHAT YOU HAVE—IT'S WHAT YOU DO BETTER, FOR WHOM, AND HOW HARD IT IS TO COPY.



THE IDEA

A regional space economy competitive advantage is the ability to consistently deliver greater value in the space sector than other places.

It goes beyond having assets—it combines unique strengths, smart choices, and strong systems that competitors find difficult to replicate.

THE COMPETITIVE ADVANTAGE FRAMEWORK: FOUR PILLARS

1 UNIQUE STRENGTHS



Distinct capabilities, know-how, resources, or talent that few other regions have.

2 DIFFERENTIATION



Offer something better or meaningfully different—not just the same, but cheaper.

3 MARKET FIT



Strong alignment with real customer needs and high-growth space markets.

4 DEFENSIBILITY



Barriers to imitation—such as embedded networks, trust, proprietary knowledge, or place-based advantages.

WHERE COMPETITIVE ADVANTAGE COMES FROM



TALENT

Skilled people, entrepreneurial mindset, and continuous learning pipelines.



SUPPLIERS & ECOSYSTEM

Deep, reliable supply chains and specialized service providers.



RESEARCH & INNOVATION

Universities, R&D centers, and a culture of applied innovation.



INFRASTRUCTURE & FACILITIES

Test ranges, labs, manufacturing, data, energy, and connectivity.



CUSTOMERS & DEMAND

Anchor customers, procurement opportunities, and early adopters.



POLICY & INSTITUTIONS

Supportive policies, funding, partnerships, and streamlined processes.

WHY COMPETITIVE ADVANTAGE MATTERS



SUSTAINED GROWTH

Attracts investment, talent, and companies that compound over time.



HIGHER VALUE

Enables higher wages, better jobs, and greater returns for the region.



ECONOMIC RESILIENCE

Diverse strengths and strong ecosystems withstand shocks and cycles.



GLOBAL POSITIONING

Builds recognition and influence in priority space markets.



BROAD PROSPERITY

Benefits spread across communities through inclusive growth.

HOW REGIONS BUILD AND STRENGTHEN ADVANTAGE



FOCUS

Choose where to win based on strengths and market demand.



INVEST

Target strategic capabilities, facilities, and ecosystem connections.



COLLABORATE

Build trusted partnerships across industry, academia, and government.



COMMERCIALIZE

Turn research and ideas into products, services, and companies.



MEASURE & ADAPT

Track outcomes, learn fast, and adjust strategies to stay ahead.



CONNECT GLOBALLY

Link to global networks, markets, and talent to accelerate impact.



KEY TAKEAWAY

COMPETITIVE ADVANTAGE IN THE SPACE ECONOMY IS ABOUT UNIQUE STRENGTHS, SMART DIFFERENTIATION, MARKET ALIGNMENT, AND DEFENSIBILITY—POWERED BY PEOPLE, PARTNERSHIPS, AND PURPOSEFUL ACTION.

HOW CAN REGIONS BUILD AROUND ANCHOR SPACE COMPANIES?

A PRACTICAL FRAMEWORK TO LEVERAGE ANCHOR PRESENCE FOR BROADER, LASTING GROWTH

ANCHOR IMPACT OVERVIEW

Anchor space companies—prime contractors, launch providers, satellite operators, or major manufacturers—create long-term value by generating demand, building capabilities, and attracting investment that strengthen the entire regional economy.

THE ANCHOR GROWTH PATHWAY: FOUR STAGES

1 ANCHOR PRESENCE



A major space company locates or expands in the region, creating stable jobs and demand.

2 SUPPLIER & CAPABILITY DEVELOPMENT



Local suppliers emerge and scale; technical capabilities, infrastructure, and services grow.

3 TALENT & INVESTMENT ATTRACTION



The region attracts skilled talent, entrepreneurs, research partners, and capital.

4 ECOSYSTEM EXPANSION & DIVERSIFICATION



A broader space ecosystem and diverse industries emerge—building resilience and sustained growth.

HOW ANCHOR COMPANIES STRENGTHEN REGIONS



DEMAND DRIVER

Creates immediate demand for goods, services, and skilled labor.



CREDIBILITY SIGNAL

Builds confidence with investors, partners, and other companies to locate nearby.



WORKFORCE DEVELOPMENT

Drives training, apprenticeships, and university partnerships.



SUPPLY CHAIN CATALYST

Spurs supplier growth, quality standards, and local innovation.



TECHNOLOGY & INNOVATION

Accelerates R&D, testing, and commercialization of new solutions.



CAPITAL MAGNET

Attracts public and private investment into the region.

WHY ANCHORS MATTER: SPILLOVER EFFECTS



JOB MULTIPLIER

Indirect and induced jobs multiply the economic impact.



SME GROWTH

Small and mid-sized firms win contracts, scale, and enter new markets.



TALENT DEEPENING

A deeper talent pool improves productivity and entrepreneurship.



RESEARCH & IP

Stronger research, patents, and commercial activity emerge.



INFRASTRUCTURE UPGRADE

Facilities, digital networks, and transport improve competitiveness.



RESILIENCE

A diverse ecosystem reduces risk and supports long-term prosperity.

HOW REGIONS CAN BUILD AROUND ANCHOR FIRMS



ALIGN ON PRIORITIES

Co-create a shared vision with the anchor on workforce, suppliers, R&D, and infrastructure.



STRENGTHEN SUPPLIERS

Provide supplier outreach, match-making, quality support, and access to finance.



INVEST IN TALENT

Expand STEM education, technical training, and apprenticeships aligned to needs.



ENABLE INNOVATION

Support R&D collaboration, test facilities, incubators, and technology transfer.



BUILD INFRASTRUCTURE

Invest in sites, power, connectivity, labs, and logistics to remove growth constraints.



MARKET THE REGION

Promote capabilities, success stories, and investment opportunities proactively.



MEASURE & ADAPT

Track outcomes, gather feedback, and refine programs for continuous improvement.

KEY TAKEAWAY



ANCHOR SPACE COMPANIES CAN BE POWERFUL ENGINES FOR REGIONAL GROWTH. BY INVESTING IN PEOPLE, SUPPLIERS, INFRASTRUCTURE, AND INNOVATION—AND BY WORKING IN PARTNERSHIP—REGIONS CAN TURN ANCHOR PRESENCE INTO A THRIVING, RESILIENT SPACE ECOSYSTEM THAT BENEFITS EVERYONE.

HOW CAN REGIONS DEVELOP STRONGER SPACE SUPPLY CHAINS?

BUILD LOCAL CAPABILITY. CONNECT ECOSYSTEMS. COMPETE GLOBALLY.



STRONG SUPPLY CHAINS DRIVE SPACE GROWTH

Resilient, diverse, and capable supply chains reduce risk, lower costs, speed innovation, and help regions capture more value in the space economy.

A FOUR-STEP FRAMEWORK FOR SUPPLY CHAIN STRENGTH

1 MAP & DISCOVER



Identify local suppliers, capabilities, and gaps across the value chain.

2 QUALIFY & DEVELOP



Strengthen quality, security, and process maturity to meet buyer needs.

3 CONNECT & TRANSACT



Link suppliers to primes and programs through matchmaking, platforms, and long-term deals.

4 SCALE & RESILIENT



Invest, diversify, and build redundancy to compete and withstand shocks.

BUILDING BLOCKS OF A STRONG SPACE SUPPLY CHAIN



CAPABLE SUPPLIERS

A base of innovative, financially healthy firms with the right skills and capacity.



STANDARDS & QUALITY

Adoption of space-relevant standards (ISO 9001, AS9100, ITAR compliance) and best practices.



LOGISTICS & MATERIALS

Reliable access to materials, transport, and warehousing with traceability and on-time delivery.



FINANCE & INCENTIVES

Access to capital, bonding, and targeted incentives that help firms invest, scale, and de-risk.



WORKFORCE & TALENT

Skilled, inclusive workforce pipelines in engineering, manufacturing, and quality assurance.



DEMAND & PIPELINE

Visible demand from primes, gov't missions, and commercial markets signals opportunity.

WHY STRONG SUPPLY CHAINS MATTER



REDUCES RISK

Mitigates single points of failure and dependency on distant sources.



LOWERS COSTS

Local sourcing cuts lead times, transport costs, and change orders.



SPEEDS DELIVERY

Shorter cycles improve schedule certainty and mission success.



IGNITES INNOVATION

Closer collaboration sparks ideas and accelerates product advances.



GROWS ECONOMIES

Creates high-quality jobs, exports, and tax revenue for long-term growth.



BUILDS RESILIENCE

Diverse networks withstand shocks and adapt to market changes.

HOW REGIONS CAN ACCELERATE SUPPLY CHAIN DEVELOPMENT



SET A CLEAR STRATEGY

Define priorities and target subsectors aligned with regional strengths and markets.



CONVENE & CONNECT

Bring together industry, academia, government and investors to build trust and share opportunities.



STRENGTHEN TALENT

Expand training, apprenticeships, and reskilling in in-demand technical and digital skills.



SUPPORT SUPPLIERS

Fund technical assistance, quality improvement, and certification for smaller firms.



DRIVE PROCUREMENT

Use anchor procurement, set-asides, and supplier diversity to open doors to new suppliers.



MEASURE & IMPROVE

Track supplier performance, identify gaps, and adapt programs based on evidence.



KEY TAKEAWAY

STRONG SPACE SUPPLY CHAINS ARE BUILT ON TRUST, CAPABILITY, AND CONNECTIONS. REGIONS THAT INVEST IN THEIR ECOSYSTEMS TODAY WILL COMPETE, INNOVATE, AND LEAD TOMORROW.

HOW CAN NON-SPACE COMPANIES BECOME SPACE SUPPLIERS?

A PRACTICAL ROADMAP TO ENTER AND SUCCEED IN THE SPACE SUPPLY CHAIN



OVERVIEW

The space industry needs innovative suppliers for hardware, software, services, and operations. Companies from other sectors can leverage existing strengths, meet space requirements, and build relationships to win business and grow in global space supply chains.

THE 4-STEP ENTRY PATHWAY

1 IDENTIFY YOUR FIT



Assess your capabilities and products for space relevance. Target real customer needs and gaps.

2 MEET SPACE STANDARDS



Understand and comply with quality, reliability, traceability, and safety requirements (e.g., ISO, ECSS).

3 BUILD RELATIONSHIPS



Engage with primes, system integrators, and programs. Attend industry events and use supplier portals.

4 WIN CONTRACTS



Respond to RFQs and RFPs, prove your value, and deliver on time and to spec. Grow and expand.

TRANSFERABLE INDUSTRIES & CAPABILITIES



ELECTRONICS

PCBs, power systems, sensors, components, testing, and quality assurance.



SOFTWARE & IT

Embedded software, cybersecurity, AI/ML, data processing, cloud, and DevOps.



MATERIALS

Advanced alloys, composites, coatings, thermal management, and adhesives.



MANUFACTURING

Precision machining, additive manufacturing, clean room assembly, inspection, and metrology.



TELECOM & RF

Antennas, RF components, ground systems, networks, and signal processing.



ENGINEERING SERVICES

Systems engineering, mechanical, thermal, structural, test, integration, and consulting.

WHY IT MATTERS



SECURE & RESILIENT

Diverse suppliers strengthen supply chains and reduce mission risk.



DRIVE INNOVATION

New ideas and technologies improve performance and lower costs.



GROW YOUR BUSINESS

Access a growing market with long-term opportunities and global reach.



BUILD CAPABILITIES

Investing in quality and processes opens doors across high-reliability sectors.



ECONOMIC IMPACT

Local jobs, exports, and innovation strengthen regional economies.

HOW REGIONS CAN HELP



AWARENESS & OUTREACH

Promote opportunities and share clear pathways to get started.



TRAINING & UPSKILLING

Build workforce skills in quality, engineering, and advanced tech.



ADVISORY & MENTORING

Provide expert guidance on requirements, standards, and approach.



FUNDING & INCENTIVES

Offer grants, loans, and tax incentives to reduce transition costs.



CONNECTIONS & NETWORKS

Connect firms to primes, programs, clusters, and industry events.



TEST & INNOVATION FACILITIES

Provide labs, test beds, and equipment to prototype and qualify.



KEY TAKEAWAY

NON-SPACE COMPANIES CAN BECOME VALUED SPACE SUPPLIERS BY FOCUSING ON REAL NEEDS, MEETING REQUIREMENTS, BUILDING RELATIONSHIPS, AND DELIVERING EXCELLENCE—CREATING VALUE FOR CUSTOMERS AND GROWTH FOR YOUR BUSINESS.

HOW CAN REGIONS IDENTIFY GAPS IN THEIR SPACE SUPPLY CHAINS?

A PRACTICAL FRAMEWORK TO FIND MISSING CAPABILITIES AND REMOVE BOTTLENECKS

OVERVIEW

Understanding your space supply chain helps your region spot what you have, what's missing, and what is holding growth back. A systematic approach reveals gaps and guides smart, targeted investments to build a stronger, more competitive ecosystem.

4-STEP GAP ANALYSIS FRAMEWORK

1 MAP THE CHAIN



List end-to-end activities from mission needs to operations and end-of-life. Identify key inputs, outputs, and dependencies.

2 ASSESS CAPABILITIES



Evaluate local providers against technical, quality, capacity, and business requirements. Score and document strengths and limits.

3 FIND BOTTLENECKS



Identify gaps, single points of failure, long lead times, and capacity constraints. Quantify impact on cost, schedule, and reliability.

4 PRIORITIZE ACTION



Rank gaps by impact and feasibility. Select high-value actions and track progress with clear metrics and milestones.

WHAT TO LOOK FOR: COMMON SUPPLY CHAIN GAPS



MISSING COMPONENTS

Key parts or materials not available locally or domestically.



TEST & VALIDATION

Limited access to labs, ranges, or environmental testing.



QUALITY & CERTIFICATION

Lack of standards compliance support or certified suppliers.



LOGISTICS & LEAD TIMES

Long or unreliable shipping, customs bottlenecks, or limited carriers.



FINANCING & INSURANCE

Capital gaps, limited working capital, or hard-to-obtain insurance.



TALENT & CAPACITY

Shortage of skilled engineers, trades, quality, or program managers.



SOFTWARE & DATA

Limited tools, IP access, or cybersecurity capabilities.

WHY GAP ANALYSIS MATTERS: WARNING SIGNS



LONG LEAD TIMES

Delays in critical components or testing slow down projects.



SINGLE POINTS OF FAILURE

Over-reliance on one supplier or source increases risk.



HIGH COSTS

Expensive imports or rework drive up total cost of ownership.



FREQUENT DISRUPTIONS

Supply instability impacts schedules and mission outcomes.



LOST OPPORTUNITIES

Unmet demand and growth leak to other regions or countries.



SLOW INNOVATION

Limited capabilities constrain new products and services.

HOW REGIONS CAN CLOSE IDENTIFIED GAPS



CONVENE STAKEHOLDERS

Bring together industry, government, academia, and users to align needs and solutions.



BUILD CAPABILITIES

Invest in facilities, equipment, and shared services to fill critical gaps.



DEVELOP TALENT

Expand education, apprenticeships, and upskilling in priority technical areas.



SUPPORT SUPPLIERS

Provide mentoring, quality programs, and access to contracts and networks.



IMPROVE ACCESS TO CAPITAL

Leverage grants, loans, and patient capital to enable growth.



REDUCE BARRIERS

Simplify procurement, fast-track permits, and harmonize standards.



MEASURE & ITERATE

Track metrics, reassess gaps, and adjust actions regularly.



KEY TAKEAWAY

MAP YOUR SPACE SUPPLY CHAIN, ASSESS CAPABILITIES, FIND BOTTLENECKS, AND PRIORITIZE ACTIONS TO CLOSE GAPS AND BUILD A RESILIENT, COMPETITIVE ECOSYSTEM.

HOW CAN REGIONAL SPACE SUPPLY CHAINS BECOME MORE RESILIENT?

STRATEGIES TO WITHSTAND DISRUPTION, ABSORB SHOCKS, AND RECOVER FASTER



RESILIENCE IDEA

Resilient space supply chains can anticipate disruptions, adapt quickly, and continue delivering critical components and services. By diversifying sources, strengthening capabilities, and building visibility, regions can reduce vulnerabilities and sustain growth through uncertainty.

RESILIENCE FRAMEWORK: FOUR STEPS

1 ASSESS RISK



Identify critical suppliers, single points of failure, and disruption scenarios.

2 DIVERSIFY SUPPLY



Build supplier diversity and multiple sourcing options across geographies.

3 STRENGTHEN CONTINUITY



Plan for continuity with inventory, flexible capacity, and alternative workarounds.

4 MONITOR & IMPROVE



Track performance, share information, and continuously improve readiness and response.

KEY RESILIENCE LEVERS



SUPPLIER DIVERSITY

Avoid over-reliance on any single supplier or region.



STRATEGIC INVENTORY

Hold buffers of critical parts and long-lead materials.



CYBER & DATA SECURITY

Protect systems and intellectual property across the supply chain.



LOGISTICS FLEXIBILITY

Use multiple transport routes and logistics providers.



WORKFORCE RESILIENCE

Cross-train teams and maintain backup talent pipelines.



LOCAL CAPABILITY BUILDING

Invest in regional capacity for critical technologies.

WHY RESILIENCE MATTERS: COMMON RISKS



COMPONENT SHORTAGES

Limited availability and long lead times delay production.



GEOPOLITICAL DISRUPTION

Trade restrictions and instability can disrupt supplies.



NATURAL HAZARDS

Extreme weather and disasters damage facilities and infrastructure.



CYBER INCIDENTS

Attacks can halt operations and compromise sensitive data.



WORKFORCE SHORTAGES

Talent gaps and turnover slow delivery and innovation.



COST & INFLATION PRESSURES

Rising costs reduce margins and strain project budgets.

HOW REGIONS CAN IMPROVE RESILIENCE



MAP & PRIORITIZE RISKS

Create supply chain maps and focus on highest-impact vulnerabilities.



BUILD STRONG PARTNERSHIPS

Collaborate with suppliers, customers, and peers to share risk and solutions.



SUPPORT SUPPLIER DEVELOPMENT

Invest in supplier capability, quality, and technology upgrades.



LEVERAGE PUBLIC PROGRAMS

Use grants, incentives, and procurement to strengthen critical capabilities.



SHARE INTELLIGENCE & BEST PRACTICES

Participate in forums to exchange data and improve collective readiness.



MEASURE & STRESS TEST

Run scenario tests and track resilience metrics over time.



KEY TAKEAWAY

DIVERSIFY, PREPARE, AND COLLABORATE. RESILIENT SPACE SUPPLY CHAINS PROTECT JOBS, ENABLE MISSIONS, AND DRIVE SUSTAINABLE REGIONAL GROWTH.

HOW CAN REGIONS USE SPACE PROCUREMENT TO GROW LOCAL COMPANIES?

SMART PROCUREMENT BUILDS CAPABILITY, CREATES JOBS, AND STRENGTHENS THE SPACE ECONOMY.



OVERVIEW

Public and anchor institutions buy space data, services, and technology every day. By using strategic procurement—focused on local firms—regions can grow capabilities, retain talent, attract investment, and deliver better outcomes for public priorities.

A FOUR-STEP PROCUREMENT PATHWAY

1 DEFINE NEED



Identify a mission need and desired outcomes. Engage local firms early to shape requirements.

2 PILOT SOLUTION



Use pilots, feasibility studies, or prototypes to test solutions with local companies.

3 AWARD WORK



Competitively award contracts with clear scope, milestones, and local value expectations.

4 EXPAND DEMAND



Scale through follow-on contracts, frameworks, and cross-agency purchasing to build markets.

PROCUREMENT TOOLS THAT GROW LOCAL COMPANIES



PILOTS & PROTOTYPES

Low-risk funding to test ideas, validate solutions, and reduce market barriers.



DEMONSTRATION PROJECTS

Real-world trials to prove performance and de-risk larger deployments.



CHALLENGE & PRIZE PROGRAMS

Crowdsourced innovation to solve specific problems with measurable goals.



LOCAL SET-ASIDES & PREFERENCES

Reserve opportunities or give preference to local SMEs where permitted by policy.



SUBCONTRACTING & SUPPLIER GOALS

Require prime contractors to engage local suppliers and build capacity.



SERVICE & OUTCOME CONTRACTS

Focus on results (e.g., data quality, uptime, insights) instead of prescribing inputs.

WHY PROCUREMENT MATTERS



BUILDS CAPABILITY

Creates experience, certifications, and IP that strengthen local firms.



DRIVES ECONOMIC IMPACT

Generates high-quality jobs, grows revenues, and increases regional tax contributions.



SPURS INNOVATION

Procurement signals demand, encouraging R&D and new solutions.



STRENGTHENS SUPPLY CHAINS

Diversifies suppliers, reduces risk, and improves resilience for critical missions.



ATTRACTS INVESTMENT

Visible demand and track record help local firms raise private capital.

HOW REGIONS CAN USE PROCUREMENT MORE EFFECTIVELY



ALIGN WITH PRIORITIES

Tie procurements to regional strategies (e.g., climate, safety, infrastructure, sustainability).



ENGAGE EARLY & OFTEN

Consult local firms early, share pipelines, and co-develop requirements.



KEEP IT ACCESSIBLE

Use clear language, proportionate rules, and smaller lots to lower barriers for SMEs.



MEASURE & LEARN

Track outcomes, local spend, and performance to improve future procurement.



PARTNER & COORDINATE

Work with universities, incubators, and other public buyers to leverage resources and avoid duplication.



KEY TAKEAWAY

PROCUREMENT IS MORE THAN A PURCHASE—IT IS A POWERFUL ECONOMIC DEVELOPMENT TOOL. USE IT INTENTIONALLY TO OPEN MARKETS, BUILD LOCAL CAPABILITY, AND GROW A THRIVING SPACE ECOSYSTEM.

HOW CAN REGIONAL GOVERNMENTS BECOME LEAD CUSTOMERS FOR SPACE SERVICES?

A PRACTICAL FRAMEWORK TO USE PUBLIC PROCUREMENT TO DRIVE INNOVATION AND DELIVER PUBLIC VALUE



LEAD CUSTOMER IDEA

Regional governments can catalyze local space innovation by being the first to buy emerging space-enabled services. By articulating real public needs, piloting solutions, and buying with purpose, regions reduce risk for suppliers and accelerate delivery of services that strengthen communities and drive economic growth.

FOUR-STEP PATH TO BECOME A LEAD CUSTOMER

1 IDENTIFY PUBLIC NEEDS



Engage departments and communities to prioritize challenges where space data or services can deliver clear value and measurable outcomes.

2 TEST & VALIDATE



Run pilots or proofs of value with providers. Validate utility, accuracy, reliability, cost, and ease of integration.

3 PROCURE & DEPLOY



Use flexible procurement to buy proven solutions and integrate them into operations and workflows.

4 SCALE & SHARE



Expand successful services across departments and partners. Share outcomes and lessons to grow the market.

SPACE-ENABLED SERVICES REGIONAL GOVERNMENTS CAN BUY



EARTH OBSERVATION

Monitor land use, assets, crops, water, and hazards with high- and medium-resolution imagery.



CONNECTIVITY SERVICES

Expand broadband access and backhaul for remote communities and public assets.



EMERGENCY RESPONSE

Rapid damage assessment, situation awareness, and coordination during disasters and incidents.



INFRASTRUCTURE MONITORING

Track condition of roads, bridges, rails, utilities, and public buildings to support maintenance and resilience.



ENVIRONMENTAL MANAGEMENT

Monitor forests, water quality, air quality, and biodiversity to inform decisions to meet targets.



PUBLIC SAFETY & COMMUNITY SERVICES

Support policing, maritime awareness, search and rescue, and service delivery planning.

WHY LEAD CUSTOMERS DRIVE STRONGER REGIONAL OUTCOMES



SOLVE REAL PROBLEMS

Focus investments on outcomes that matter to communities.



DE-RISK INNOVATION

Early demand reduces risk for companies and attracts suppliers.



BETTER VALUE FOR MONEY

Competition and evidence-based buying improve value and outcomes.



BUILD LOCAL CAPACITY

Strengthen skills, jobs, and data capabilities across the region.



ATTRACT INVESTMENT & PARTNERS

Proven demand and partnerships unlock more private investment.



INCREASE RESILIENCE

Better information and services build a safer, more resilient region.

HOW REGIONAL GOVERNMENTS CAN BE SMARTER FIRST BUYERS



SET OUTCOME-BASED GOALS

Define clear outcomes, success metrics, and service needs.



ENGAGE EARLY WITH MARKET

Talk to suppliers, startups, and research partners to understand what's possible.



USE FLEXIBLE PROCUREMENT

Leverage pilots, innovation partnerships, RFPs, and multi-stage contracts.



ENSURE DATA & SECURITY

Set clear standards for data rights, privacy, security, and interoperability.



MEASURE & LEARN CONTINUOUSLY

Track performance, costs, and impact. Iterate and improve services over time.



SHARE & COLLABORATE

Share results and templates with other regions to scale impact together.



BE BOLD, START SMALL, AND LEARN FAST.
BY BUYING SMART, REGIONAL GOVERNMENTS CAN UNLOCK THE POWER OF SPACE SERVICES TODAY—DELIVERING BETTER OUTCOMES AND BUILDING A STRONGER, INNOVATIVE REGIONAL ECONOMY.

HOW CAN REGIONS COMMERCIALIZE UNIVERSITY SPACE RESEARCH?

TURNING DISCOVERIES INTO BUSINESSES, JOBS, AND ECONOMIC GROWTH



WHY UNIVERSITY SPACE RESEARCH MATTERS

Universities generate breakthroughs in areas like advanced materials, autonomy, propulsion, communications, Earth observation, and data analytics. Commercializing this research drives high-value startups, attracts investment, and strengthens regional competitiveness in the global space economy.

THE COMMERCIALIZATION PATHWAY: FROM RESEARCH TO MARKET

1 RESEARCH DISCOVERY



University researchers make a discovery or develop a novel technology with space applications.

2 PROOF OF CONCEPT



Validate the technology, build prototypes, and demonstrate technical feasibility.

3 IP ASSESSMENT & PROTECTION



Evaluate intellectual property and file patents to protect the innovation and enable commercial use.

4 INDUSTRY VALIDATION & PARTNERSHIPS



Engage industry partners and customers to validate needs, refine solutions, and de-risk adoption.

5 COMPANY CREATION OR LICENSING



Launch a startup or license the technology. Scale operations and grow market presence.

MARKET GROWTH & IMPACT



Generate revenue, create jobs, expand industries, and drive regional and global impact.

COMMERCIALIZATION ENABLERS



TECH TRANSFER OFFICES

Skilled teams that identify inventions, protect IP, and connect researchers with industry.



INCUBATORS & ACCELERATORS

Structured programs that mentor teams, provide resources, and help startups reach key milestones.



TEST & DEMO FACILITIES

Access to labs, clean rooms, range facilities, and data to test and demonstrate solutions.



INDUSTRY PARTNERS

Early engagement with companies brings real-world requirements and pathways to market.



TRANSLATIONAL FUNDING

Grants, seed funds, and investment that bridge the gap between research and commercial viability.



ENTREPRENEURIAL CULTURE

A supportive environment that celebrates risk-taking, collaboration, and learning from failure.

WHY COMMERCIALIZATION MATTERS



HIGH-VALUE JOBS

Create skilled careers for students, researchers, and professionals in engineering, science, and business.



STARTUP GROWTH

Drive the creation of space and space-enabled companies that scale locally and globally.



LICENSING REVENUE

Generate non-dilutive income for universities that can be reinvested in research.



SUPPLIER & INDUSTRY DEVELOPMENT

Strengthen local supply chains and diversify the regional economy through new industries.



INNOVATION SPILLOVERS

Accelerate innovation across sectors through talent, ideas, and technology transfer.

HOW REGIONS CAN HELP



PROOF-OF-CONCEPT FUNDS

Provide early-stage funding to validate technologies and attract follow-on investment.



PARTNERSHIP PROGRAMS

Facilitate connections between universities, industry, investors, and government customers.



MENTOR & ADVISOR NETWORKS

Connect founders and researchers with experienced entrepreneurs and domain experts.



CUSTOMER DISCOVERY

Help teams engage early with potential customers to validate needs and refine solutions.



SHARED INFRASTRUCTURE

Invest in facilities, equipment, and digital tools that lower barriers and reduce costs.



KEY TAKEAWAY

COMMERCIALIZING UNIVERSITY SPACE RESEARCH REQUIRES A CONNECTED ECOSYSTEM, EARLY SUPPORT, AND CLEAR PATHWAYS TO MARKET. WHEN REGIONS INVEST IN PEOPLE, PARTNERSHIPS, AND INFRASTRUCTURE, RESEARCH BECOMES REAL-WORLD SOLUTIONS THAT BUILD PROSPERITY.

HOW CAN REGIONS BUILD MORE SPACE STARTUPS?

A PRACTICAL GUIDE TO GROWING INNOVATION, JOBS, AND LONG-TERM ECONOMIC IMPACT



WHY SPACE STARTUPS MATTER

Space startups turn bold ideas into real solutions—from satellites and data services to launch, exploration, and space-enabled applications.

They create high-value jobs, attract investment, and build resilient, future-ready regional economies.

A FOUR-STEP STARTUP-BUILDING FRAMEWORK

1 INSPIRE FOUNDERS



Spark interest and entrepreneurial mindsets through outreach, education, and visible role models.

2 SUPPORT IDEA VALIDATION



Help teams test problems, validate solutions, and refine business models with early resources and expert guidance.

3 INCUBATE & ACCELERATE



Provide tailored programs, mentors, technical support, and pilot opportunities to build products and traction.

4 CONNECT TO CAPITAL & CUSTOMERS



Open doors to investors, grants, procurement pathways, and strategic partners to scale and grow.

ESSENTIAL INGREDIENTS OF A STRONG STARTUP ECOSYSTEM



UNIVERSITIES & RESEARCH

World-class research, student talent, and technology transfer fuel innovation.



ENTREPRENEURIAL FOUNDERS

Ambitious, diverse founders with domain expertise and a will to solve big problems.



MENTORS & EXPERTS

Experienced advisors provide guidance, networks, and practical insights.



INCUBATORS & ACCELERATORS

Structured programs that de-risk ideas and speed startup development.



TEST & DEMO FACILITIES

Access to labs, ground stations, and test ranges for validation and experimentation.



PROCUREMENT ACCESS

Early customer pathways through public and anchor buyer programs.



SEED & EARLY-STAGE FUNDING

Grants, microfunds, and angel networks to turn ideas into investable companies.

WHY MORE SPACE STARTUPS MATTER



DRIVE INNOVATION

Startups challenge assumptions and bring new products, services, and business models to market.



DIVERSIFY THE ECONOMY

A broader base of companies reduces risk and creates stable, long-term growth.



ATTRACT TALENT

Dynamic startup ecosystems draw skilled talent and encourage people to build and stay in the region.



BUILD FUTURE CLUSTERS

Today's startups become tomorrow's industry leaders and anchor the next wave of opportunity.

HOW REGIONS CAN TAKE ACTION



LAUNCH ENTREPRENEURSHIP PROGRAMS

Embed space entrepreneurship in schools, universities, and community initiatives.



SUPPORT FOUNDERS AT EVERY STAGE

Provide coaching, workspace, legal help, and technical resources.



CREATE DEMO & PILOT OPPORTUNITIES

Offer challenges, sandboxes, and testbeds to validate solutions in real-world conditions.



STREAMLINE REGULATORY & POLICY SUPPORT

Make it easier to start and operate space businesses in your region.



BUILD NETWORKS & PARTNERSHIPS

Connect startups with mentors, corporates, investors, and global markets.



KEY TAKEAWAY

REGIONS CAN BUILD MORE SPACE STARTUPS BY INSPIRING FOUNDERS, PROVIDING THE RIGHT RESOURCES, AND CONNECTING THEM TO CAPITAL AND CUSTOMERS—CREATING A VIBRANT ECOSYSTEM THAT POWERS INNOVATION AND SHARED PROSPERITY.

HOW CAN REGIONS HELP SPACE STARTUPS SCALE?

PRACTICAL ACTIONS TO MOVE SPACE STARTUPS FROM PROMISE TO SUSTAINABLE GROWTH

WHY SCALING IS DIFFERENT

Scaling a space startup means delivering reliable products and services at scale, winning repeat customers, and competing globally. It requires more capital, longer sales cycles, strict certification, and stronger operations than getting started.

Startups form ideas. Scale creates impact.

THE SPACE STARTUP SCALE-UP PATHWAY: FOUR STAGES

1 VALIDATE PRODUCT-MARKET FIT



Prove your solution solves a real problem. Build credibility with early customers and demonstrate value in real missions.

2 STRENGTHEN OPERATIONS & QUALITY



Build repeatable processes, ensure quality and reliability, and prepare for certification and mission assurance.

3 EXPAND CUSTOMERS & CAPITAL



Grow your sales pipeline, secure larger contracts, and access the capital needed to scale revenue.

4 SCALE PRODUCTION & PARTNERSHIPS



Increase production capacity, deepen supply chains, and forge strategic partnerships to accelerate growth.

COMMON SCALING BARRIERS



CAPITAL INTENSITY
High costs for R&D, testing, hardware, and infrastructure require significant upfront and growth capital.



LONG SALES CYCLES
Complex procurement, mission timelines, and stakeholder approvals delay revenue and cash flow.



CERTIFICATION & REGULATION
Rigorous standards and compliance processes take time and specialized expertise.



MANUFACTURING CAPACITY
Limited facilities, equipment, and supply chain depth constrain production scale and speed.



TALENT & CAPACITY
Finding and retaining specialized talent is challenging in competitive and growing markets.



EXPORT READINESS
Navigating export controls, ITAR, customs, and international markets adds complexity and cost.

WHY HELPING STARTUPS SCALE MATTERS



HIGH-QUALITY JOB GROWTH
Scaling startups create skilled jobs across engineering, manufacturing, and business functions.



ANCHOR FIRMS & SUPPLY CHAINS
Successful companies become anchors, strengthening local supply chains and supplier capabilities.



INVESTMENT ATTRACTION
Proven scale-up stories attract investors, partners, and new companies to the region.



CLUSTER MATURITY
A strong scale-up ecosystem builds resilience, innovation, and long-term competitiveness.

REGIONAL ACTIONS TO HELP STARTUPS SCALE



SCALE-UP PROGRAMS
Provide coaching, mentorship, and peer networks focused on growth challenges.



PILOT & EARLY CUSTOMERS
Use public sector and anchor organizations to enable pilots and earlier revenue.



MANUFACTURING SUPPORT
Improve access to facilities, equipment, prototyping, testing, and supply chain partners.



GROWTH CAPITAL CONNECTIONS
Connect startups to investors, lenders, and grants aligned with scale-up needs.



EXPORT & MARKET ACCESS
Offer export advisory, trade missions, and market intelligence to reach global customers.



TALENT PIPELINES & UPSKILLING
Partner with colleges, universities, and industry to build and retain critical talent.



KEY TAKEAWAY

REGIONS CAN HELP SPACE STARTUPS SCALE BY REMOVING BARRIERS, PROVIDING TARGETED SUPPORT, AND CONNECTING COMPANIES TO RESOURCES AND MARKETS. WHEN STARTUPS SCALE, REGIONS PROSPER.

WHAT FINANCING GAP DOES A REGIONAL SPACE COMPANY FACE AT EACH GROWTH STAGE?

ALIGN CAPITAL WITH RISK AND CAPITAL INTENSITY TO TURN INNOVATION INTO SUSTAINABLE ECONOMIC IMPACT



THE FINANCING LADDER

Space companies progress through high-risk, capital-intensive stages. Funding needs rise sharply, but available capital is uneven. Understanding typical needs and gaps at each stage helps regions target the right solutions to keep companies moving forward.

FINANCING NEEDS & GAPS ACROSS THE GROWTH STAGES

	1 RESEARCH & PROTOTYPE	2 EARLY STARTUP	3 DEMONSTRATION & VALIDATION	4 COMMERCIAL GROWTH	5 SCALE & MANUFACTURING
TYPICAL FUNDING NEED	Concept research, feasibility studies, proof of concept.	Product development, team building, initial IP and testing.	Prototype in relevant environment, customer validation, pilots.	Market entry, working capital, scaling sales and operations.	Capacity expansion, supply chain, facilities, global reach.
COMMON FINANCING GAP	Limited non-dilutive funding and early technical risk.	Angel and seed capital scarce for deep tech and long cycles.	"Valley of death" between prototype and revenue; high test costs.	Growth capital limited; revenue may be early or lumpy.	Large capital needs exceed available private financing appetite.

KEY CAPITAL SOURCES



GRANTS & PUBLIC FUNDS

Non-dilutive funding for R&D, innovation, and technology development.



ANGEL INVESTORS

Early capital from individuals with domain expertise.



VENTURE CAPITAL

Equity for high-growth potential with higher risk tolerance.



STRATEGIC INVESTORS

Corporates and space primes providing capital and partnerships.



DEBT & LOANS

Working capital and equipment financing with repayment.



EXPORT & TRADE FINANCE

Supports for international sales, guarantees, and buyer credit.



PUBLIC PROCUREMENT

Government and defense contracts that de-risk early revenue.

WHY FINANCING GAPS MATTER



HIGHER STARTUP MORTALITY

Promising companies stall or shut down without appropriate early-stage capital.



DELAYED COMMERCIALIZATION

Time-to-market slows, increasing costs and losing market windows.



LOSS OF TALENT & IP

Teams and ideas move to regions with better access to capital.



WEAKER REGIONAL GROWTH

Fewer successful firms mean less investment, jobs, and tax revenue.

REGIONAL SOLUTIONS TO CLOSE THE GAP



PROOF-OF-CONCEPT FUNDS

De-risk early ideas and build investable foundations.



SEED & STARTUP PROGRAMS

Provide early capital, mentorship, and founder support.



CATALYTIC CAPITAL

Public or blended funds that crowd in private investors.



INVESTOR NETWORKS

Connect companies with investors, mentors, and customers.



LOAN GUARANTEES

Reduce lender risk and improve access to debt financing.



DEMAND-SIDE SUPPORT

Use procurement, pilots, and anchor customers to create market pull.



KEY TAKEAWAY

FINANCING GAPS EMERGE AT EVERY STAGE OF A SPACE COMPANY'S JOURNEY. REGIONS CAN DRIVE STRONGER OUTCOMES BY ALIGNING CAPITAL, DE-RISKING INVESTMENT, AND BUILDING AN ECOSYSTEM THAT HELPS COMPANIES GROW AND SCALE.

HOW CAN REGIONS ATTRACT SPACE VENTURE CAPITAL AND STRATEGIC INVESTORS?

ACTIONABLE STRATEGIES TO BUILD INVESTOR CONFIDENCE, GROW DEAL FLOW, AND SCALE YOUR SPACE ECONOMY



WHY INVESTOR ATTRACTION MATTERS

Venture capital and strategic investors provide more than funding—they bring expertise, networks, credibility, and access to global markets.

Attracting the right investors accelerates company growth, deepens your ecosystem, creates high-value jobs, and increases your region's visibility in the global space economy.

INVESTOR ATTRACTION FRAMEWORK: FOUR STEPS

1

BUILD INVESTABLE COMPANIES



Support founders to build strong teams, validate solutions, achieve milestones, and demonstrate market fit.

2

IMPROVE VISIBILITY AND POSITIONING



Showcase your region's strengths, companies, and opportunities through targeted messaging and thought leadership.

3

CREATE AND CURATE DEAL FLOW



Generate a steady pipeline of high-quality opportunities and make it easy for investors to evaluate and engage.

4

STRENGTHEN ECOSYSTEM TRUST AND TRUST



Build long-term relationships, deliver results, and sustain a reputation for quality and follow-through.

WHAT INVESTORS LOOK FOR



STRONG TEAMS

Experienced, mission-driven founders with complementary skills and execution capability.



CUSTOMER TRACTION

Early customers, real-world pilots, and evidence of product-market fit.



DIFFERENTIATED TECHNOLOGY

Proprietary IP, clear advantages, and the ability to solve difficult problems better than alternatives.



SCALABLE MARKETS

Large addressable markets with global potential and clear growth drivers.



CLEAR MILESTONES AND PLAN

Defined roadmap, measurable milestones, and realistic use of capital.



SYNDICATION POTENTIAL

Opportunities to co-invest with reputable partners and attract follow-on capital.

WHY INVESTOR PRESENCE MATTERS



FASTER GROWTH

Access to capital and expertise accelerates scale and shortens time to market.



STRONGER STARTUPS

Investors help refine strategy, improve governance, and open doors to customers and partners.



ECOSYSTEM VALIDATION

Investor backing raises your region's profile and attracts more talent, companies, and capital.



TALENT ATTRACTION AND RETENTION

A vibrant funding environment helps attract and retain world-class talent.

ACTIONS REGIONS CAN TAKE



HOST INVESTOR-FOCUSED EVENTS

Run targeted demo days, roadshows, and pitch sessions that connect founders with the right investors.



BUILD FOUNDER-INVESTOR NETWORKS

Facilitate introductions, peer networks, and ongoing engagement between startups and investors.



LAUNCH CO-INVESTMENT PROGRAMS

Use public capital strategically to catalyze private investment and de-risk early opportunities.



PROVIDE MARKET INTELLIGENCE

Share data, market insights, and trend analysis to help investors make confident decisions.



CONNECT TO STRATEGIC CORPORATES

Open pathways to corporate partners for pilots, procurement, and strategic investment.



KEY TAKEAWAY

ATTRACTING SPACE VENTURE CAPITAL AND STRATEGIC INVESTORS REQUIRES A CLEAR STRATEGY, CONSISTENT EXECUTION, AND A FOCUS ON BUILDING INVESTABLE COMPANIES, STRONG RELATIONSHIPS, AND GLOBAL TRUST.

HOW CAN REGIONS ATTRACT FOREIGN SPACE INVESTMENT?

A PRACTICAL FRAMEWORK TO POSITION YOUR REGION AS A DESTINATION FOR GLOBAL SPACE CAPITAL AND CAPABILITY



WHY FOREIGN DIRECT INVESTMENT MATTERS

Foreign investors bring capital, capabilities, and global connections that accelerate innovation and competitiveness. FDI in the space sector strengthens local industries, creates quality jobs, expands exports, and diversifies regional economies.

FOUR-STEP FRAMEWORK TO ATTRACT INVESTMENT

1 IDENTIFY TARGET INVESTORS



Research and prioritize companies and funds aligned with your region's strengths and strategic sectors.

2 CRAFT A VALUE PROPOSITION



Articulate clear differentiators—capabilities, assets, cost advantages, and growth potential.

3 PREPARE SITES & PARTNERSHIPS



Ensure investment-ready sites, strong infrastructure, and trusted partners across industry, academia, and government.

4 PROVIDE INVESTOR AFTERCARE



Deliver responsive support after investment to enable growth, retention, and expansion.

SITE SELECTION FACTORS FOR SPACE INVESTORS



TALENT & WORKFORCE

Access to skilled engineers, technicians, scientists, and specialized training pipelines.



INFRASTRUCTURE & CONNECTIVITY

Reliable power, high-speed internet, test facilities, and advanced communications.



POLICY & REGULATORY STABILITY

Predictable rules, efficient permitting, IP protection, and transparent processes that build confidence.



MARKET ACCESS & LOGISTICS

Proximity to customers, spaceports, suppliers, and transport links to global markets.



COMPETITIVE COST STRUCTURE

Attractive operating costs including real estate, labor, utilities, and business services.



SUPPLY CHAIN ECOSYSTEM

Depth and quality of local suppliers, manufacturing, and services partners.



QUALITY OF LIFE & LIVABILITY

Safe communities, housing options, amenities, and welcoming places to live and work.

WHY FOREIGN INVESTMENT MATTERS



HIGH-QUALITY JOBS

Creates well-paying jobs across engineering, operations, business, and advanced manufacturing.



TECHNOLOGY TRANSFER

Brings advanced technologies, know-how, and best practices that raise regional capability.



GLOBAL MARKET CONNECTIONS

Connects local firms to international value chains and new commercial opportunities.



STRONGER SUPPLIER BASE

Stimulates supplier development and innovation across the regional ecosystem.

ACTIONS REGIONS CAN TAKE



DEVELOP INVESTMENT PROSPECTUSES

Create clear, compelling materials that showcase assets, sectors, and opportunities.



COORDINATE MARKETING

Promote your region through targeted outreach, missions, events, and digital channels.



OFFER SOFT-LANDING SUPPORT

Provide tailored assistance with market entry, site visits, and relocation planning.



ENSURE INCENTIVE CLARITY

Make programs, grants, and tax policies easy to understand, access, and compare.



FACILITATE PARTNER INTRODUCTIONS

Connect investors with industry, research, suppliers, and public sector partners.



KEY TAKEAWAY

ATTRACTING FOREIGN SPACE INVESTMENT REQUIRES PURPOSEFUL STRATEGY, COMPETITIVE ADVANTAGES, AND RELENTLESS EXECUTION. FOCUS ON WHAT INVESTORS VALUE MOST, DELIVER EXCELLENT EXPERIENCES, AND BUILD LASTING PARTNERSHIPS THAT DRIVE SHARED GROWTH.

WHAT MAKES A SITE READY FOR A SPACE ECONOMY INVESTMENT?

ESSENTIAL CONDITIONS THAT SIGNAL READINESS AND REDUCE RISK FOR INVESTORS AND SPACE COMPANIES

SITE READINESS OVERVIEW

Site readiness means a location has the physical infrastructure, regulatory clarity, skilled talent, reliable services, and growth capacity needed for space companies to launch, test, manufacture, operate, and scale with confidence.

**READY SITES ATTRACT INVESTMENT,
CREATE JOBS, AND BUILD LONG-TERM VALUE.**

SITE READINESS FRAMEWORK: FOUR PILLARS

1 LAND & FACILITIES



- Shovel-ready land with clear title
- Zoning for target uses
- Suitable topography & ground conditions
- Existing buildings and pad sites

2 UTILITIES & CONNECTIVITY



- Reliable power with capacity to grow
- High-speed broadband and low latency
- Water, wastewater, and other services
- Redundant and resilient systems

3 PERMITTING & GOVERNANCE



- Clear, predictable permitting pathways
- Environmental clarity
- Coordinated agencies and timelines
- Supportive local policies and incentives

4 WORKFORCE & EXPANSION



- Access to skilled talent and training
- Strong education and partnerships
- Capacity for suppliers and services
- Room to expand and scale

KEY SITE SELECTION FACTORS



POWER CAPACITY

Sufficient, reliable power with headroom for future growth and redundancy.



BROADBAND CONNECTIVITY

High-speed, low-latency connectivity for operations, data, and security.



TRANSPORT ACCESS

Proximity to highways, rail, airports, and ports for people and cargo.



ENVIRONMENTAL SUITABILITY

Favorable climate and natural conditions with responsible land stewardship.



SECURITY & SAFETY

Physical security, emergency services access, and strong safety culture.



FLEXIBLE SPACE

Adaptable facilities and pad areas for R&D, testing, manufacturing, and operations.



ROOM TO EXPAND

Available land and infrastructure capacity to support future phases.

WHY SITE READINESS MATTERS



SPEED TO MARKET

Ready sites shorten timelines so companies can build, test, and launch faster.



LOWER RISK

Clear requirements and reliable infrastructure reduce uncertainty and cost overruns.



INVESTOR CONFIDENCE

Demonstrates professionalism, reduces due diligence time, and improves financing outcomes.



STRONGER COMPETITIVENESS

Positions your region as the preferred destination for space companies and high-value partnerships.

HOW REGIONS CAN IMPROVE SITE READINESS



SITE CERTIFICATION

Establish a recognized site readiness program with clear standards and transparent data.



UTILITY PLANNING

Plan and invest ahead for power, broadband, water, and wastewater capacity.



PRE-PERMITTING

Complete studies and early engagement to clear pathways and accelerate permit approvals.



DATA ROOMS

Maintain centralized, up-to-date site data, documents, and technical reports.



COORDINATED RESPONSE

Create a cross-agency, one-window team to support companies at every step.



KEY TAKEAWAY

SITE READINESS IS BUILT, NOT FOUND. FOCUS ON THE FOUNDATIONAL PILLARS, ADDRESS KEY SELECTION FACTORS, AND CONTINUOUSLY IMPROVE TO BECOME THE GO-TO CHOICE FOR SPACE ECONOMY INVESTMENT.

WHEN DOES SPECIALIZED SPACE INFRASTRUCTURE MAKE ECONOMIC SENSE?

A DECISION GUIDE FOR INVESTING IN CLEANROOMS, TEST FACILITIES, LABS, ANTENNA SITES, AND MANUFACTURING ASSETS



WHAT IS SPECIALIZED SPACE INFRASTRUCTURE?

These are purpose-built facilities and assets that support space activities but are more specialized or capital intensive than general business infrastructure.

EXAMPLES INCLUDE:



CLEANROOMS



TEST FACILITIES



LABORATORIES



ANTENNA SITES



MANUFACTURING ASSETS

DECISION FRAMEWORK: FIVE CRITICAL QUESTIONS

1 REAL DEMAND



Is there current or committed demand from companies and programs that need this capability?

2 UTILIZATION POTENTIAL



Can the facility achieve sufficient utilization from multiple users, projects, or programs to be viable?

3 CAPABILITY GAP



Does a clear gap exist that cannot be met by existing regional, national, or global options?

4 BUSINESS MODEL



Is there a credible operating and financial model with defined roles, revenue, and costs?

5 LONG-TERM SUSTAINABILITY



Will the capability remain relevant and supported over the long term as markets, technologies, and programs evolve?

THE BENEFITS WHEN JUSTIFIED



LOWER BARRIERS TO ENTRY

Enables startups and scale-ups to innovate and compete.



GROW LOCAL SUPPLIERS

Strengthens the supply chain and builds local capability.



ATTRACT & RETAIN TALENT

Provides hands-on opportunities and career pathways.



STRENGTHEN CLUSTERS

Creates a focal point for collaboration and innovation.



INCREASE REGIONAL COMPETITIVENESS

Positions the region for investment, contracts, and economic growth.

THE RISKS WHEN POORLY JUSTIFIED



UNDERUTILIZATION

Facilities sit idle or are used below the level needed for sustainability.



HIGH OPERATING COSTS

Costs exceed revenue or public support capacity.



DUPLICATION

Overlaps with existing assets or planned investments.



WEAK MARKET FIT

Capability does not match market needs or evolves beyond relevance.



FINANCIAL RISK

Public funds are at risk with limited economic return or impact.

ACTIONS FOR REGIONS TO GET IT RIGHT



ENGAGE INDUSTRY EARLY

Co-design solutions with companies, researchers, and end users.



PURSUE SHARED-USE MODELS

Design for multi-user access to broaden demand and reduce costs.



INVEST IN PHASES

Start with core capabilities and expand as demand and utilization grow.



BUILD STRONG PARTNERSHIPS

Leverage government, academia, industry, and private capital.



USE EVIDENCE-BASED PLANNING

Validate demand, utilization, and financial viability before committing.



KEY TAKEAWAY

INVEST IN SPECIALIZED SPACE INFRASTRUCTURE ONLY WHEN DEMAND IS REAL, THE GAP IS CLEAR, AND A SUSTAINABLE MODEL EXISTS. THE RIGHT INVESTMENT AT THE RIGHT TIME CAN UNLOCK INNOVATION, GROW INDUSTRY, AND DELIVER LASTING ECONOMIC IMPACT.

SHOULD A REGION DEVELOP A SPACEPORT?

A DECISION GUIDE FOR REGIONAL LEADERS: EVALUATE, PLAN, AND INVEST WISELY

OVERVIEW

A spaceport is a major, long-term investment that can unlock high-value opportunities—but it is not the right path for every region.

This guide helps leaders evaluate readiness, weigh benefits against risks, and make an informed decision aligned with regional strengths and goals.

DECISION FRAMEWORK: KEY EVALUATION AREAS

1 MARKET DEMAND



Is there current or expected demand for launch or test services that the region can serve?

2 GEOGRAPHY & AIRSPACE



Does the location offer favorable geography, trajectory access, and available airspace?

3 REGULATION & SAFETY



Can the region meet safety standards and navigate regulatory processes effectively?

4 INFRASTRUCTURE & UTILITIES



Are critical infrastructure, power, water, and digital connectivity available or feasible?

5 CAPITAL INTENSITY



Can the region sustain the high upfront and ongoing capital and operating requirements?

6 COMPETING ALTERNATIVES



Would alternative investments deliver stronger economic impact with lower risk?

POTENTIAL BENEFITS



LAUNCH ACTIVITY

Attract launch services, missions, and related operations to the region.



SUPPLIER DEVELOPMENT

Grow local supply chains, SMEs, and advanced manufacturing.



BRANDING & VISIBILITY

Elevate regional profile and signal innovation and ambition.



TEST & INNOVATION CAPABILITY

Enable testing of vehicles, payloads, and emerging technologies.



WORKFORCE DEVELOPMENT

Create high-quality jobs and strengthen STEM education and training.

MAJOR RISKS & CONSTRAINTS



UNCERTAIN DEMAND

Market conditions and technology shifts can reduce demand or change timelines.



LONG TIMELINES

Permitting, design, and construction can take many years before revenue.



ENVIRONMENTAL & COMMUNITY IMPACTS

Noise, emissions, land use, and cultural impacts require careful management.



HIGH COSTS

Significant capital and operating costs create financial risk.



OPERATIONAL COMPLEXITY

Requires specialized expertise, safety systems, and 24/7 operations.

ACTIONS FOR REGIONS



CONDUCT FEASIBILITY STUDIES

Validate technical, market, legal, and financial feasibility.



PURSUe PHASED PLANNING

Start small, de-risk investments, and build readiness over time.



ENGAGE STAKEHOLDERS EARLY

Involve communities, Indigenous partners, industry, and public agencies.



EXPLORE PARTNERSHIP MODELS

Consider public-private partnerships and shared-risk arrangements.



ASSESS OPPORTUNITY COST

Compare with other strategic investments that could drive greater impact.



KEY TAKEAWAY

A SPACEPORT CAN DRIVE TRANSFORMATIVE OPPORTUNITY—BUT ONLY IF IT ALIGNS WITH REAL DEMAND, REGIONAL STRENGTHS, AND LONG-TERM CAPACITY. EVALUATE RIGOROUSLY, ENGAGE BROADLY, AND INVEST ONLY WITH EYES WIDE OPEN.

HOW CAN GROUND STATIONS CREATE REGIONAL ECONOMIC OPPORTUNITY?

CONNECTING SPACE ASSETS TO REGIONAL STRENGTHS, JOBS, AND LONG-TERM PROSPERITY



WHAT ARE GROUND STATIONS?

Ground stations are the on-the-ground link between satellites in space and data, users, and applications here on Earth. They send commands up to satellites and receive, download, and route data for a wide range of public and commercial services.

WHY THEY MATTER



Ground stations turn space data into real-world benefits—supporting communication, navigation, Earth observation, science, and safety. Hosting them locally creates jobs, attracts investment, and strengthens regional resilience.

THE GROUND STATION OPPORTUNITY PATHWAY: FOUR STEPS

1

ANTENNA INFRASTRUCTURE



Deploy and operate antennas and supporting facilities with reliable power, physical space, and site infrastructure.

2

OPERATIONS & SERVICES



Provide 24/7 operations, network management, uplink/downlink scheduling, and customer services.

3

DATA HANDLING & ANALYTICS



Process, store, and analyze data; integrate with cloud and AI tools to create insights and new applications.

4

CLUSTER & SPILLOVERS



Attract related companies and investments, expanding the space and data ecosystem.

REGIONAL VALUE CREATION



TECHNICAL JOBS

Create high-quality jobs in operations, engineering, IT, cybersecurity, and site maintenance.



DATA SERVICES

Enable data hosting, processing, and application development for public and private customers.



CO-LOCATION DEMAND

Drive demand for nearby data centers, edge compute, office space, and business services.



RESEARCH PARTNERSHIPS

Collaborate with universities and labs on research, training, and technology development.



CONNECTIVITY ASSETS

Strengthen digital infrastructure and resilience for communities and emergency response.

SITE AND BUSINESS CONSIDERATIONS



SPECTRUM ENVIRONMENT

Ensure access to necessary spectrum and a clean RF environment for reliable operations.



RELIABLE POWER

Provide dependable, redundant power with backup systems to support 24/7 operations.



BACKHAUL CONNECTIVITY

High-capacity, low-latency connectivity to major networks and internet exchanges.



SECURITY & SAFETY

Protect facilities, data, and people with strong physical and cybersecurity.



MAINTENANCE ACCESS

Ensure site access, spares, and local technical capacity for rapid response and uptime.



CUSTOMER ACCESS

Proximity to customers and partners improves service quality and collaboration.

ACTIONS REGIONS CAN TAKE



DEVELOP SHARED SITE OPTIONS

Identify and prepare sites with zoning, access roads, and utilities for faster development.



STREAMLINE PERMITTING

Simplify and coordinate permits and reviews to reduce time and uncertainty.



BUILD ACADEMIC LINKAGES

Partner with local colleges and universities for training, research, and talent pipelines.



SUPPORT DATA BUSINESSES

Attract and grow companies that use and build value from space derived data.



ENGAGE INDUSTRY PARTNERS

Promote the region, market advantages, and connect with operators and investors.



KEY TAKEAWAY

GROUND STATIONS TURN SPACE CONNECTIONS INTO REGIONAL GROWTH. BY INVESTING IN THE RIGHT INFRASTRUCTURE, PARTNERSHIPS, AND POLICIES, REGIONS CAN ATTRACT INVESTMENT, CREATE JOBS, AND BUILD A THRIVING DATA-DRIVEN ECONOMY FOR THE FUTURE.

HOW CAN SPACE DATA BECOME A REGIONAL DIGITAL INDUSTRY?

FROM SATELLITES TO SOLUTIONS THAT POWER COMMUNITIES, BUSINESSES, AND SUSTAINABLE GROWTH



WHAT IS SPACE DATA?

Space data is information collected by satellites and sensors about Earth and space. It includes imagery, radar, positioning, climate, and environmental data.

When combined with software and analytics, it becomes actionable insights that help solve real-world problems and drive economic value.

THE VALUE CHAIN: FROM SATELLITE DATA TO DIGITAL PRODUCTS & SERVICES

1 DATA ACQUISITION



Satellites and sensors collect Earth observation and space data.

2 DATA DELIVERY



Secure ground stations and networks deliver data to users quickly and reliably.

3 DATA PROCESSING



Raw data is cleaned, calibrated, and processed into analysis-ready information.

4 ANALYTICS & INSIGHTS



AI, machine learning, and geospatial analysis turn data into insights tailored to user needs.

5 PRODUCTS & SERVICES



Insights are packaged as dashboards, APIs, reports, and decision tools for customers and partners.

6 IMPACT & VALUE



Better decisions, efficiency, resilience, and new markets drive economic and social outcomes.

KEY ENABLERS: ASSETS & CAPABILITIES



DATA ACCESS INFRASTRUCTURE

Ground stations, high-speed networks, and cloud platforms for reliable data ingestion and delivery.



DATA & COMPUTE PLATFORMS

Scalable storage, compute, and software tools to process and manage large datasets.



TECHNOLOGY & SOFTWARE SKILLS

Expertise in AI/ML, geospatial analysis, software engineering, and product development.



TALENT & COMMUNITY

Skilled workforce, entrepreneurs, and supportive ecosystems that foster innovation.



TRUST, SECURITY & GOVERNANCE

Data security, privacy, standards, and ethical use build trust and enable responsible data sharing.



POLICY & PROCUREMENT

Enabling policies and public procurement create demand and open opportunities for local solutions.

REGIONAL ECONOMIC BENEFITS



NEW BUSINESSES & JOBS

Startups, scale-ups, and supplier companies create high-quality, knowledge-based employment.



INNOVATION & COMPETITIVENESS

Access to unique data and tools drives innovation and strengthens regional industry.



PRODUCTIVITY & COST SAVINGS

Better insights improve operations, reduce risk, and lower costs across key industries and services.



SUSTAINABILITY & RESILIENCE

Data-driven solutions support climate action, disaster response, and resource stewardship.



EXPORTS & GLOBAL MARKETS

Digital products and services can scale globally, bringing revenue and recognition.



BETTER OUTCOMES FOR COMMUNITIES

Smarter decisions improve health, mobility, safety, and quality of life for residents.

COMMON BARRIERS



HIGH COSTS & LIMITED ACCESS

Data, infrastructure, and tools can be expensive and hard to access.



SKILLS & TALENT GAPS

Shortage of specialized skills in data science, geospatial analysis, and software.



DATA QUALITY & INTEGRATION

Inconsistent data, different formats, and legacy systems limit usability.



POLICY & DATA RESTRICTIONS

Regulatory complexity and data restrictions can slow innovation and partnerships.

PRACTICAL REGIONAL ACTIONS



BUILD A CLEAR STRATEGY

Identify priority applications and align stakeholders around shared goals.



INVEST IN INFRASTRUCTURE

Improve connectivity, data access, and cloud capabilities for the region.



DEVELOP TALENT & PARTNERSHIPS

Support training, education, and industry-academic collaboration.



SUPPORT STARTUPS & SMEs

Provide funding, mentorship, testbeds, and market access opportunities.



CREATE EARLY DEMAND

Use public sector data and challenges to pilot solutions and scale impact.



KEY TAKEAWAY

SPACE DATA BECOMES A REGIONAL DIGITAL INDUSTRY WHEN DATA ACCESS, TALENT, TECHNOLOGY, AND PARTNERSHIPS COME TOGETHER TO CREATE VALUABLE SOLUTIONS, BY INVESTING IN ENABLERS, OVERCOMING BARRIERS, AND TAKING BOLD ACTION, REGIONS CAN BUILD SUSTAINABLE GROWTH AND A BETTER FUTURE FOR THEIR COMMUNITIES.

HOW ARE ARTIFICIAL INTELLIGENCE AND SPACE DATA CREATING REGIONAL OPPORTUNITIES?

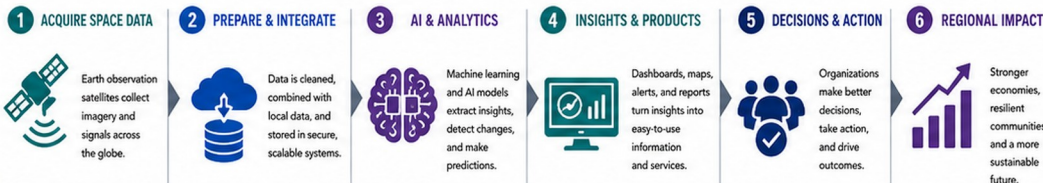
SMARTER INSIGHTS. BETTER DECISIONS. STRONGER REGIONS.

THE POWER OF COMBINATION

Satellites capture vast, consistent observations of our planet. Artificial intelligence turns that data into actionable intelligence. Together, they reveal patterns, predict change, and enable smarter decisions that unlock economic and social benefits across every region.



THE PATHWAY: FROM SPACE TO SOLUTIONS



HIGH-IMPACT USE CASES FOR REGIONS



THE DIGITAL ECOSYSTEM ENABLING OPPORTUNITY



ACTIONS REGIONS CAN TAKE



KEY TAKEAWAY

WHEN REGIONS COMBINE THE POWER OF SPACE DATA AND ARTIFICIAL INTELLIGENCE WITH THE RIGHT ECOSYSTEM, TALENT, AND COLLABORATION, THEY UNLOCK SMARTER DECISIONS, NEW BUSINESSES, AND RESILIENT COMMUNITIES—CREATING OPPORTUNITIES THAT LAST.



HOW CAN CYBERSECURITY BECOME PART OF A REGIONAL SPACE CLUSTER?

SECURE SPACE. STRONGER ECONOMY. RESILIENT REGION.



WHY CYBERSECURITY MATTERS FOR SPACE

Space systems are increasingly connected and software-driven, making them vulnerable to cyber threats that can disrupt missions, compromise data, and cause economic and reputational damage. Embedding cybersecurity across the space ecosystem protects operations, builds trust, and strengthens resilience and competitiveness.



SPACECRAFT & PAYLOADS

Command and control, onboard software, sensors, and data links can be targeted to disrupt or degrade missions.



GROUND SYSTEMS & NETWORKS

Ground stations, mission control, and operations networks face intrusion, malware, and unauthorized access risks.



COMMUNICATIONS LINKS

Uplinks, downlinks, and relay networks are vulnerable to interception, jamming, spoofing, and man-in-the-middle attacks.



SOFTWARE & SUPPLY CHAINS

Vulnerabilities in code, third-party components, tools, and updates can compromise systems before launch and during operations.



DATA & PLATFORMS

Space-derived data and cloud platforms are prime targets for data theft, tampering, ransomware, and service disruption.

REGIONAL OPPORTUNITIES FOR CYBERSECURITY



CYBERSECURITY SERVICES

Security assessment, monitoring, incident response, red teaming, and compliance specialized for space systems.



TALENT & WORKFORCE DEVELOPMENT

Build a pipeline of cyber talent through academia, training programs, and industry-led certifications.



INNOVATION & R&D

Advance secure architectures, resilient communications, and AI-driven threat detection for the space domain.



NEW VENTURES & STARTUPS

Support startups building security solutions for satellites, launch, ground systems, and space data.



EXPORT & COMPETITIVENESS

Deliver trusted, secure solutions that strengthen regional firms in domestic and global space markets.



ACADEMIA & RESEARCH INSTITUTIONS

Curriculum, applied research, and testbeds that connect talent, science, and industry challenges.



INDUSTRY & PRIME CONTRACTORS

Share requirements, standards, and testing needs; create pilot projects and commercialization pathways.



GOVERNMENT & DEFENCE

Policy, standards, procurement, and funding that de-risk investment and protect critical space infrastructure.



CYBER RANGES & TEST FACILITIES

Secure labs, digital twins, and simulation environments to test, validate, and train for real-world threats.



SECURE DIGITAL INFRASTRUCTURE

High-assurance networks, cloud sovereignty, and identity services that enable trusted collaboration.

HOW REGIONS CAN TAKE ACTION



ASSESS & PLAN

Identify regional strengths, gaps, and priorities to build a focused cybersecurity roadmap.



INVEST IN TALENT

Expand education, apprenticeships, and upskilling to grow a diverse and sustainable workforce.



BUILD CAPABILITIES

Develop labs, ranges, and tools that support testing, validation, and continuous improvement of security solutions.



CONVENE & CONNECT

Create forums and networks to align stakeholders, share knowledge, and spark partnerships.



FUND & INCENTIVIZE

Use grants, loans, and incentives to accelerate innovation and commercialization of cyber solutions.



PROMOTE & SCALE

Support go-to-market activities and global outreach to grow export-ready cybersecurity businesses.



KEY TAKEAWAY

CYBERSECURITY IS A FOUNDATIONAL ENABLER OF A THRIVING SPACE CLUSTER. BY INVESTING IN TALENT, INFRASTRUCTURE, PARTNERSHIPS, AND INNOVATION—AND BY ALIGNING ACTIONS ACROSS INDUSTRY, ACADEMIA, AND GOVERNMENT—REGIONS CAN BUILD SECURE SPACE SYSTEMS, CREATE HIGH-VALUE JOBS, AND LEAD IN THE GLOBAL SPACE ECONOMY.

HOW CAN DUAL-USE TECHNOLOGIES EXPAND REGIONAL SPACE MARKETS?

SHARED INNOVATION. STRONGER INDUSTRIES. GREATER IMPACT.



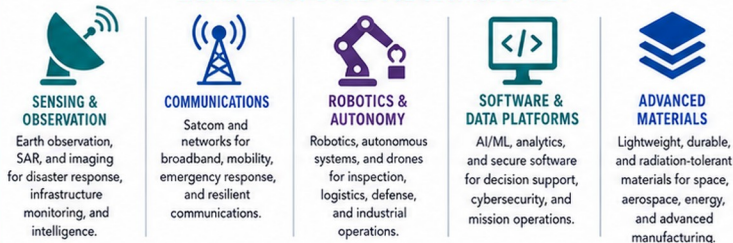
WHAT ARE DUAL-USE TECHNOLOGIES?

Dual-use technologies are capabilities with applications in both civilian and defense markets. They allow the same innovations to solve multiple missions, reduce costs, accelerate adoption, and strengthen regional space ecosystems.

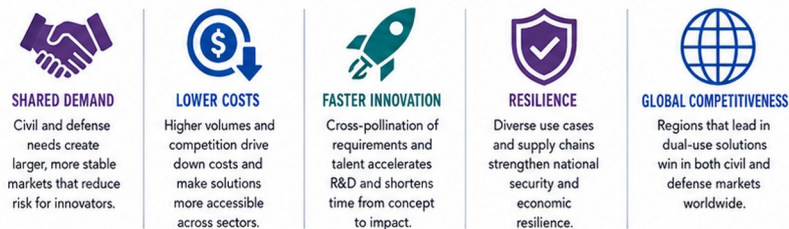
THE DUAL-USE IMPACT PATHWAY: FROM INNOVATION TO MARKET EXPANSION



EXAMPLES OF DUAL-USE TECHNOLOGIES



HOW CIVIL AND DEFENSE MARKETS REINFORCE EACH OTHER



WHAT REGIONS CAN DO TO EXPAND SPACE MARKETS



KEY TAKEAWAY

DUAL-USE TECHNOLOGIES MULTIPLY OPPORTUNITY. BY ALIGNING CIVIL AND DEFENSE NEEDS, REGIONS CAN SPARK INNOVATION, CREATE HIGH-VALUE JOBS, ATTRACT INVESTMENT, AND BUILD COMPETITIVE, RESILIENT SPACE ECONOMIES THAT DELIVER BENEFITS AT HOME AND AROUND THE WORLD.

HOW DO EXPORT CONTROLS AFFECT REGIONAL SPACE COMPANIES?

SHAPING ACCESS, COMPETITIVENESS, AND GROWTH IN THE GLOBAL SPACE ECONOMY



WHAT ARE EXPORT CONTROLS?

Export controls are government rules that restrict the transfer of sensitive goods, technology, software, and data to certain countries, entities, or end uses.

They aim to protect national security and foreign policy interests while supporting responsible space activity.

HOW EXPORT CONTROLS WORK: THE PATH FROM PRODUCT TO PARTNER



BUSINESS IMPACTS FOR REGIONAL SPACE COMPANIES



WHY REGIONAL SUPPORT MATTERS



PRACTICAL ACTIONS

ACTIONS FOR REGIONS



ACTIONS FOR COMPANIES



KEY TAKEAWAY

EXPORT CONTROLS ARE A REALITY, BUT THEY DON'T HAVE TO BE A BARRIER. WITH THE RIGHT KNOWLEDGE, PROCESSES, AND SUPPORT, REGIONAL SPACE COMPANIES CAN COMPLY CONFIDENTLY, ACCESS GLOBAL MARKETS, BUILD STRONG PARTNERSHIPS, AND DRIVE SUSTAINABLE ECONOMIC GROWTH.



HOW CAN REGIONS HELP SPACE COMPANIES ENTER INTERNATIONAL MARKETS?

LOCAL SUPPORT. GLOBAL OPPORTUNITY. SHARED PROSPERITY.



WHY GOING GLOBAL MATTERS

International markets unlock new customers, diversify revenue, reduce risk, and accelerate innovation. Regions that help space companies expand globally attract investment, create high-quality jobs, build resilient supply chains, and strengthen their reputation as hubs of aerospace leadership.

THE INTERNATIONAL MARKET ENTRY PATHWAY

1 PREPARE & ASSESS



Evaluate capabilities, target markets, value proposition, and export readiness.

2 MEET REQUIREMENTS & CERTIFY



Secure necessary certifications, export approvals, and compliance with local regulations.

3 BUILD CONNECTIONS & PARTNERSHIPS



Engage partners, distributors, integrators, and government contacts in target markets.

4 GATHER MARKET INTELLIGENCE



Understand customer needs, competition, standards, pricing, and cultural and business practices.

5 ACCESS FINANCING & RISK SUPPORT



Leverage funding, credit support, insurance, and risk mitigation tools to grow globally.

6 ENTER & SCALE THE MARKET



Execute entry plan, deliver value, build local presence, and scale operations sustainably.

7 LEARN & EXPAND



Continuous learning, relationship building, and expansion into new markets and opportunities.

KEY BARRIERS SPACE COMPANIES FACE



COMPLEX REGULATIONS & EXPORT CONTROLS

Navigating differing laws, licensing, and compliance requirements.



LIMITED MARKET KNOWLEDGE

Lack of insight into customer needs, standards, pricing, and local practices.



DIFFICULTY FINDING TRUSTED PARTNERS

Challenges identifying reliable partners, distributors, and customers abroad.



FINANCING & RISK CONSTRAINTS

High costs, currency risk, long sales cycles, and limited access to capital.



LOGISTICS & SUPPLY CHAIN COMPLEXITY

Export logistics, ITAR/EAR restrictions, and international shipping hurdles.

HOW REGIONS CAN HELP: SUPPORT TOOLS & SERVICES



EXPORT READINESS PROGRAMS

Training, workshops, and 1:1 advisory to build export plans and capabilities.



TRADE MISSIONS & MARKET ACCESS

Organize delegations, buyer meetings, and expos to open doors in target markets.



PARTNER & NETWORK CONNECTIONS

Introduce companies to global partners, integrators, and industry networks.



CERTIFICATION & COMPLIANCE SUPPORT

Guidance on standards, testing, certifications, and export control requirements.



FINANCING & RISK SOLUTIONS

Connect to grants, loans, export credit, insurance, and investor networks.



MARKET INTELLIGENCE & DATA

Provide market reports, regulatory updates, and competitive insights.

REGIONAL PLAYBOOK: 6 ACTIONS THAT DRIVE GLOBAL GROWTH



ALIGN STRATEGY

Prioritize target markets and sectors where your region has strengths and advantages.



BUILD CAPACITY

Invest in talent, mentorship, and export skills across the space ecosystem.



PROMOTE YOUR REGION

Showcase regional companies and capabilities on the global stage.



LEVERAGE GLOBAL PARTNERS

Work with embassies, trade officers, and international agencies to expand reach.



INVEST IN ENABLERS

Strengthen test facilities, digital infrastructure, and logistics connectivity.



MEASURE & IMPROVE

Track outcomes, gather feedback, and refine programs to maximize impact.



KEY TAKEAWAY

WHEN REGIONS PROVIDE EXPORT READINESS, CERTIFICATION SUPPORT, MARKET ACCESS, PARTNER CONNECTIONS, FINANCING, AND INTELLIGENCE, SPACE COMPANIES CAN CONFIDENTLY ENTER INTERNATIONAL MARKETS. THIS DRIVES REVENUE, RESILIENCE, AND LONG-TERM PROSPERITY FOR COMPANIES AND COMMUNITIES ALIKE.

HOW CAN REGIONS BUILD A GLOBALLY RECOGNIZED SPACE ECONOMY BRAND?

ELEVATE IDENTITY. AMPLIFY STRENGTHS. ATTRACT OPPORTUNITY. DRIVE PROSPERITY.



WHY A STRONG SPACE ECONOMY BRAND MATTERS

A clear, credible, and distinctive brand positions your region as a destination for investment, talent, and partnerships. It builds trust, signals capability, differentiates your strengths, and creates lasting recognition in the global space ecosystem.

THE BRAND-BUILDING PATHWAY: FROM IDENTITY TO GLOBAL RECOGNITION

1 DEFINE UNIQUE POSITIONING



Identify what makes your region unique and the value you bring to the global space ecosystem.

2 FOCUS & SPECIALIZE



Concentrate on priority strengths and niche capabilities where you can lead.

3 BUILD CREDIBILITY & CAPABILITY



Invest in people, infrastructure, and quality outcomes that demonstrate real capability.

4 SHOWCASE SUCCESS STORIES



Celebrate wins and real-world impact to prove value and inspire confidence.

5 EARN VISIBILITY & MEDIA



Share your story consistently across media, events, and digital channels.

6 SIGNAL TO INVESTORS & TALENT



Communicate opportunity, support networks, and quality of life to attract investment and talent.

7 ENGAGE GLOBALLY & SUSTAIN MOMENTUM



Build global partnerships, host and participate in events, and keep evolving your brand over time.

FOUNDATIONS OF A POWERFUL SPACE BRAND



CLEAR IDENTITY & STORY

A compelling story rooted in your heritage, strengths, and vision for the future.



AUTHENTICITY & DIFFERENTIATION

Be distinct and credible—own your strengths and avoid copying others.



ECOSYSTEM ALIGNMENT

Unite government, industry, academia, and communities around a shared brand and goals.



VISIBLE LEADERSHIP & GOVERNANCE

Strong leadership and coordination ensure consistency, quality, and accountability.



CONSISTENT COMMUNICATION

Use a unified voice and visual identity across all channels and audiences.



LONG-TERM COMMITMENT

Brand strength comes from continuous action, investment, and adaptation.

AMPLIFIERS THAT DRIVE GLOBAL RECOGNITION



HOST & SPONSOR EVENTS

Conferences, workshops, and challenges put your region on the map and build networks.



MEDIA & THOUGHT LEADERSHIP

Earn media coverage, publish insights, and speak on global stages to build influence.



GLOBAL PARTNERSHIPS

Collaborate with international organizations, agencies, and industry leaders.



TALENT PIPELINE & EDUCATION

Develop and promote world-class education and training to attract and retain top talent.



INVESTOR READINESS

Make it easy to invest—clear information, support services, and strong opportunity flow.



DIGITAL PRESENCE & CONTENT

A modern website, engaging content, and active social channels expand your reach.

ACTIONS REGIONS CAN TAKE TODAY



AUDIT & ASSESS

Evaluate strengths, assets, perception, and gaps to inform your brand strategy.



BUILD THE ALLIANCE

Form a cross-sector brand council to guide strategy and alignment.



DEFINE & DESIGN

Craft your brand positioning, key messages, and visual identity.



ACTIVATE & PROMOTE

Launch campaigns, share success stories, and engage target audiences.



MEASURE & LEARN

Track awareness, engagement, and impact—refine and improve.



SUSTAIN & GROW

Reinvest, strengthen partnerships, and keep raising the bar over time.



KEY TAKEAWAY

A GLOBALLY RECOGNIZED SPACE ECONOMY BRAND IS BUILT ON CLEAR POSITIONING, REAL CAPABILITY, AND CONSISTENT STORYTELLING. WHEN REGIONS ALIGN THEIR ECOSYSTEM, SHOWCASE THEIR IMPACT, AND ENGAGE THE WORLD, THEY ATTRACT INVESTMENT, TALENT, AND PARTNERSHIPS THAT FUEL SUSTAINABLE ECONOMIC GROWTH.

HOW CAN REGIONS COMPETE FOR SPACE ECONOMY TALENT?

ATTRACT, DEVELOP, AND RETAIN THE PEOPLE WHO WILL DRIVE THE NEXT SPACE ECONOMY



TALENT IS THE LAUNCH ADVANTAGE

The space economy is powered by diverse people with bold ideas and specialized skills. Regions that build strong talent ecosystems, remove barriers, and offer great places to live and work will attract innovation, investment, and long-term economic growth.

KEY DRIVERS OF TALENT ATTRACTION AND RETENTION

1 MEANINGFUL WORK AND IMPACT



Purpose-driven missions that inspire talent and contribute to solving real-world challenges.

2 CAREER GROWTH AND LEARNING



Clear career pathways, continuing education, and opportunities to build in-demand skills.

3 COMPETITIVE COMPENSATION AND BENEFITS



Market-competitive pay, benefits, and equity that recognize talent and drive retention.

4 QUALITY OF LIFE AND COMMUNITY



Safe, inclusive, vibrant communities with amenities, culture, and outdoor opportunities.

5 ACCESS TO CAPITAL AND ENTREPRENEURSHIP



Strong funding networks, mentorship, and support to start, scale, and commercialize ideas.

6 CONNECTED ECOSYSTEM AND NETWORKS



Collaboration among industry, academia, government, and community partners.

BUILD STRONG TALENT PIPELINES



K-12 ENGAGEMENT AND STEM INTEREST

Inspire futures through outreach, mentorship, and hands-on learning experiences.



POSTSECONDARY PATHWAYS

Support relevant degree programs, co-ops, internships, and research opportunities.



APPRENTICESHIPS AND TECHNICAL TRAINING

Grow skilled trades and technicians essential to build, integrate, and operate systems.



CONTINUING UPSKILLING

Invest in lifelong learning to help talent adapt to new technologies and roles.



DIVERSE AND INCLUSIVE TALENT

Expand access and remove barriers for underrepresented groups across all career stages.



RESEARCH AND INNOVATION HUBS

Strengthen labs, centres of excellence, and commercialization pathways for breakthrough ideas.

MAKE IT EASY TO LIVE, WORK, AND BELONG



AFFORDABLE HOUSING AND ACCESS

Increase housing options and improve access to support talent at every stage.



CONNECTED AND MOBILE

Invest in reliable transportation and digital connectivity to keep people moving and productive.



HEALTH, WELLNESS, AND SAFETY

Ensure access to healthcare, recreation, and safe communities that support well-being.



WELCOME, INCLUSION, AND BELONGING

Foster welcoming communities where everyone feels valued, included, and supported.



TALENT MOBILITY AND IMMIGRATION

Streamline pathways for international talent and support relocation for in-demand skills.



FAMILY FRIENDLY FOR ALL

Provide quality childcare, schools, and support for caregivers and families.

ENGAGE AND EMPOWER EMPLOYERS



STRONG EMPLOYER NETWORKS

Connect companies to share talent needs, solutions, and opportunities for collaboration.



INTERNSHIPS AND EARLY CAREERS

Create meaningful entry points that convert students and early-career talent to jobs.



EMPLOYER BRAND AND STORY

Showcase mission, innovation, and culture to attract and excite future talent.



FLEXIBLE AND FUTURE OF WORK

Offer flexible work options and tools that enable productivity and work-life balance.



LEADERSHIP DEVELOPMENT

Invest in leadership and career advancement opportunities for all employees.



DATA AND INSIGHTS TO COMPETE

Use data to understand talent trends, track outcomes, and continuously improve strategies.

ACTIONS REGIONS CAN TAKE



ALIGN AROUND A SHARED VISION

Unite stakeholders around priorities and long-term talent goals.



COORDINATE PUBLIC INVESTMENTS

Align education, training, infrastructure, and innovation investments for maximum impact.



FOSTER PUBLIC-PRIVATE PARTNERSHIPS

Work together on initiatives that solve real talent challenges across the ecosystem.



SUPPORT STARTUPS AND SCALE-UPS

Grow the pipeline of high-growth companies that create good jobs and opportunity.



MARKET THE REGION GLOBALLY

Promote the region's strengths, lifestyle, and opportunities to talent worldwide.



MEASURE, LEARN, AND ADAPT

Track progress, share what works, and adapt to stay competitive.



KEY TAKEAWAY

REGIONS WIN THE TALENT COMPETITION BY INVESTING IN PEOPLE, PARTNERSHIPS, AND PLACES. BUILD PIPELINES, REMOVE BARRIERS, AND CREATE THRIVING COMMUNITIES WHERE TALENT CAN GROW, INNOVATE, AND STAY.

HOW CAN REGIONAL SPACE DEVELOPMENT BE INCLUSIVE AND COMMUNITY SUPPORTED?

BUILDING STRONGER COMMUNITIES, SHARED PROSPERITY, AND SUSTAINABLE SPACE FUTURES



COMMUNITY ENGAGEMENT AT THE CENTER

Inclusive space development starts with listening. Early and ongoing engagement builds trust, reflects local priorities, and ensures decisions respect community values, cultures, and long-term aspirations.

THE INCLUSIVE SPACE DEVELOPMENT PATHWAY: FROM PLANNING TO PROSPERITY

1 LISTEN & ENGAGE



Engage early and continuously with diverse voices to understand needs, ideas, and concerns.

2 PLAN TOGETHER



Co-create plans that reflect local priorities, cultural values, and shared visions for the future.

3 INVEST LOCALLY



Direct investment to community priorities, workforce development, and local infrastructure.

4 CREATE OPPORTUNITIES



Open doors to jobs, businesses, and innovation for local people and enterprises.

5 SHARE BENEFITS



Ensure fair, lasting benefits through revenue sharing, local ownership, and community well-being.

6 EVALUATE & ADAPT



Track outcomes, be transparent, and adapt to strengthen impact over time.

FOUNDATIONS FOR INCLUSIVE SPACE DEVELOPMENT



ACCESSIBLE WORKFORCE PATHWAYS

Provide training, education, and mentorship to help local residents build space-sector careers.



LOCAL PROCUREMENT & SMALL-BUSINESS OPPORTUNITY

Prioritize local suppliers and small businesses to strengthen the regional economy.



INDIGENOUS PARTICIPATION

Respect Indigenous rights, knowledge, and leadership. Partner meaningfully and share in opportunities.



TRANSPARENCY & ACCOUNTABILITY

Share information openly, report on commitments, and be accountable to communities.



ENVIRONMENTAL STEWARDSHIP

Protect land, water, air, and biodiversity through responsible practices and continuous improvement.



SOCIAL LICENSE & TRUST

Build lasting trust through respect, reliability, and delivering benefits that matter.

COMMUNITY PRIORITIES, COMMUNITY VOICE



RESPECT DIVERSITY

Value different cultures, identities, and perspectives. Ensure everyone has a seat at the table.



EQUITY & INCLUSION

Remove barriers and ensure fair access to opportunities, resources, and decision-making.



STRONG COMMUNITIES

Invest in housing, health, education, and community services that improve quality of life.



YOUTH & FUTURE GENERATIONS

Inspire and prepare youth for the future and plan for a sustainable legacy that lasts.



CELEBRATE & SHARE SUCCESSSES

Recognize achievements together and build pride in regional accomplishments.

WHAT REGIONS CAN DO TODAY



START EARLY, LISTEN OFTEN

Engage communities from the earliest stages and keep conversations ongoing.



CO-CREATE PLANS AND POLICIES

Develop strategies together that reflect shared goals and local realities.



INVEST IN PEOPLE

Support education, training, and skills development for good-paying, future-ready jobs.



BUY LOCAL, BUILD LOCAL

Create supplier pipelines and make it easier for local businesses to succeed.



PROTECT THE PLACES WE CALL HOME

Lead with sustainable practices that protect the environment for current and future generations.



MEASURE & SHARE IMPACT

Track outcomes, share stories, and use feedback to keep improving together.



KEY TAKEAWAY

INCLUSIVE REGIONAL SPACE DEVELOPMENT IS BUILT ON PARTNERSHIP, RESPECT, AND SHARED OPPORTUNITY. WHEN COMMUNITIES ARE HEARD, PEOPLE ARE EQUIPPED, AND BENEFITS ARE SHARED, SPACE INVESTMENT DRIVES PROSPERITY, STRENGTHENS COMMUNITIES, AND CREATES A FUTURE WE CAN ALL BE PROUD OF.

HOW CAN A REGION BUILD A 10-YEAR SPACE ECONOMY GROWTH ROADMAP?

A STRATEGIC PLAN FOR SUSTAINABLE PROSPERITY, INNOVATION, AND GLOBAL COMPETITIVENESS



START WITH A CLEAR VISION

Define an ambitious 10-year vision for the region's space economy that creates high-value jobs, drives innovation, improves quality of life, and strengthens global competitiveness. Align stakeholders around shared goals and long-term impact.

THE 10-YEAR ROADMAP PROCESS

1 ASSESS & ENGAGE



Engage stakeholders across industry, academia, government, investors, and communities. Assess regional assets, needs, and opportunities.

2 DEFINE STRATEGY



Establish strategic priorities, target markets, and areas of strength that differentiate the region.

3 BUILD THE PLAN



Develop initiatives, timelines, resource needs, and success measures across all key enablers and sectors.

4 ALIGN & COMMIT



Secure commitments from partners and invest in priority initiatives that accelerate early momentum.

5 IMPLEMENT



Execute initiatives, support scaling companies, attract investment, and grow the space ecosystem.

6 MEASURE & LEARN



Track performance, learn from results, and adapt actions to stay on course and maximize impact.

7 REVIEW & REFINE



Conduct regular reviews to update the roadmap, strengthen alignment, and seize new opportunities.

8 COMMUNICATE



Share progress and success to build visibility, attract partners, and inspire the next decade.

BUILDING BLOCKS OF THE SPACE ECONOMY



ASSETS & STRENGTHS

Identify existing capabilities, research excellence, industry clusters, location advantages, and unique differentiators.



INDUSTRY & SPECIALIZATION

Focus on segments where the region can compete and lead, from upstream to downstream.



COMPANIES & ENTREPRENEURS

Support startups and scale-ups, attract anchor companies, and foster supplier networks and collaboration.



TALENT & WORKFORCE

Develop skills, education pathways, and training programs to build and retain a world-class workforce.



INFRASTRUCTURE & FACILITIES

Invest in test ranges, integration labs, fab facilities, data infrastructure, and shared capabilities.



CAPITAL & FINANCING

Expand access to venture capital, growth financing, public funding, and innovative financial tools.



POLICY & GOVERNANCE

Create enabling policies, streamline approvals, reduce barriers, and strengthen regional coordination.



MARKETS & GLOBAL LINKS

Connect to global markets, partners, and programs to drive exports and international collaboration.

PHASES & MILESTONES



PHASE 1: FOUNDATION YEARS 1-2

- Establish governance and partnerships
- Complete assessments and define priorities
- Launch early initiatives and quick wins



PHASE 2: BUILD YEARS 3-5

- Invest in infrastructure and talent
- Support company growth and innovation
- Attract capital and strategic partners



PHASE 3: ACCELERATE YEARS 6-8

- Scale companies and exports
- Deepen specialization and supply chains
- Strengthen global presence and impact



PHASE 4: LEAD YEARS 9-10

- Achieve global leadership in target areas
- Drive inclusive, sustainable growth
- Set the vision for the next decade

MEASURE WHAT MATTERS



ECONOMIC GROWTH

Jobs created, GDP impact, wages, exports, and business investment.



COMPANY GROWTH

Number of startups, scale-ups, revenue growth, and business survival rates.



TALENT PIPELINE

Graduates, skilled workers, diversity, and talent attraction & retention.



INNOVATION OUTPUT

Patents, publications, new technologies, products, and commercialization success.



INFRASTRUCTURE UTILIZATION

Facility usage, capacity built, and shared resource engagement.



CAPITAL MOBILIZED

Public & private investment raised, leverage ratio, and funding deployed.



GLOBAL ENGAGEMENT

International partnerships, market access, and global rankings improvements.

REVIEW & ADAPT



- Conduct annual performance reviews
- Update priorities based on data and emerging opportunities
- Engage stakeholders and refine actions
- Ensure accountability and transparency
- Stay agile in a dynamic space economy



KEY TAKEAWAY

A 10-YEAR SPACE ECONOMY GROWTH ROADMAP ALIGNS VISION, ASSETS, AND ACTION. BY INVESTING IN PEOPLE, INFRASTRUCTURE, INNOVATION, AND PARTNERSHIPS — AND BY ADAPTING OVER TIME — A REGION CAN BUILD A THRIVING, RESILIENT SPACE ECONOMY THAT DELIVERS GENERATIONS OF IMPACT.

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