



Thriving Ports in a Competitive Environment





Bring Location Intelligence to Your Port

The international maritime market is changing. With the globalization of supply chains and shifting demand for goods and resources, vessel sizes have increased. Your port faces more challenges in this dynamic environment, ranging from performance to environmental obstacles.

Technology Can Help

Esri's spatial data integration and analysis platform leads the market in location intelligence. Beyond showing cranes on a map, Esri® technology helps you visualize relationships and streamline operations. So you move more boxes and gain a competitive advantage.

The Esri platform boosts ports in four ways:

- Optimized performance
- Smarter capital investments
- Stronger security and greater safety
- Proactive environmental stewardship

See how a location-based strategy transforms your port.

PERFORMANCE OPTIMIZATION

Maximize Your Throughput

The more containers you move, the better your bottom line. ArcGIS® software helps you know exactly how each terminal and property is performing so you can run competitive analyses. You can quickly identify places to increase efficiency and improve tenant performance.

Property and Lease Management

Find out where you can increase throughput with advanced property and lease analysis, then negotiate contracts with confidence. And with data-rich maps on mobile devices, you can show available properties to potential tenants along with the reasons they should lease. Data at your fingertips puts the best tenants in your berths.

Billing

Billing becomes faster and easier when you can see information, such as fees, on a map.

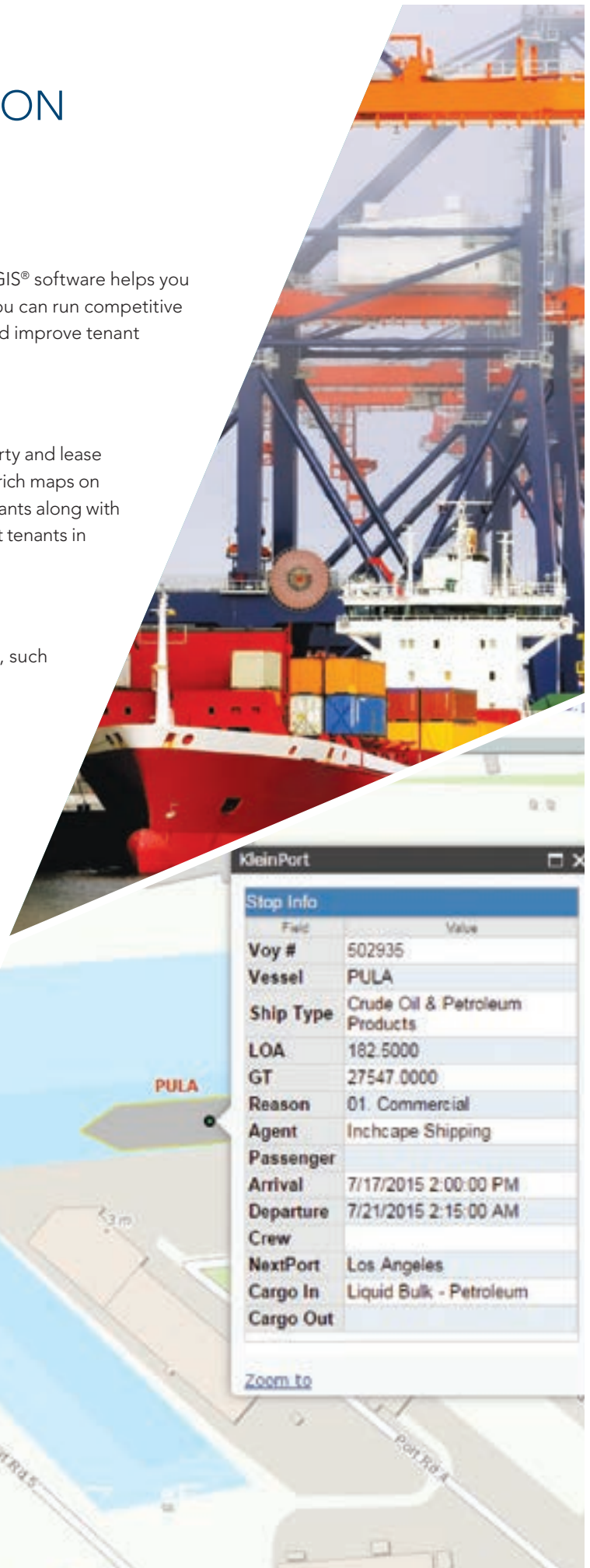
Berth Scheduling

Visualize your berth plans and integrate with real-time vessel tracking to schedule arrivals with the least amount of wait time. Increase unloading and loading efficiencies, too, so you get the most out of each hour your port operates. With a location-based strategy, you can help coordinate resource schedules, like cranes and berths, to handle incoming traffic.

Highest Return and Best Use

Underperforming assets offer an opportunity to improve your overall performance. A location-based strategy helps you understand these opportunities and make investments to continuously achieve the highest return on your properties.

Berth Planning and Monitoring with SAAB's
KleinPort, Integrated with Esri GIS



Stop Info	
Field	Value
Voy #	502935
Vessel	PULA
Ship Type	Crude Oil & Petroleum Products
LOA	182.5000
GT	27547.0000
Reason	01. Commercial
Agent	Inchcape Shipping
Passenger	
Arrival	7/17/2015 2:00:00 PM
Departure	7/21/2015 2:15:00 AM
Crew	
NextPort	Los Angeles
Cargo In	Liquid Bulk - Petroleum
Cargo Out	

[Zoom to](#)

SMARTER CAPITAL INVESTMENTS

Get More out of Each Asset

Your bollards can't tell you when they need maintenance. But your maps, together with an effective asset management solution, can. Spatially query asset information to determine which assets have high-priority maintenance needs. You'll get more out of each asset, thus making more out of your resources. With a spatially enabled asset management plan, you save on capital expenditures in the long run. Plan your infrastructure life cycles with data-driven confidence.

Capital Improvements

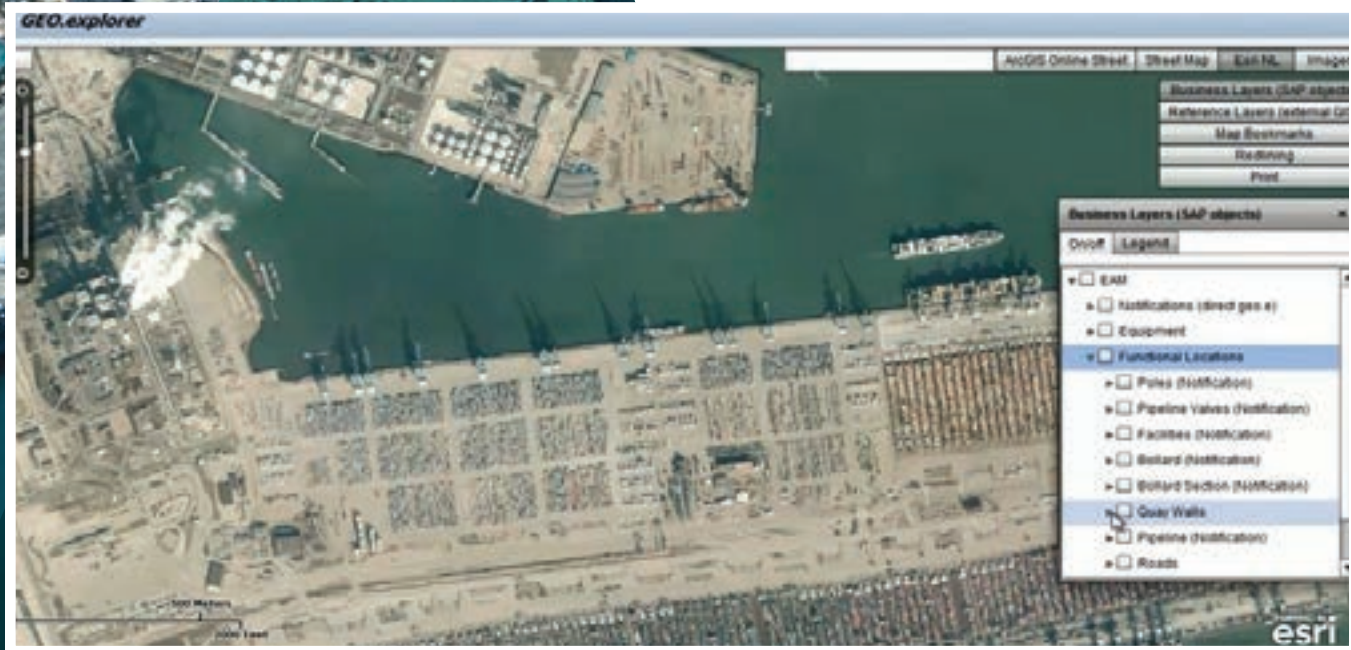
Let your data determine where your highest-value capital improvement projects should be. Dashboards show you current conditions and even update from field crews' completing jobs, in real time. So you can track, strategize, and act according to the latest capital intelligence.

Smarter Maintenance

Gain a comprehensive view of your fieldwork. Mobile apps let your field crews push job statuses straight to your screen, and in turn, you can push new information to your crews. The same app that tells you a project is completed routes your technicians to their next project. That results in greater productivity.

Utilities

Sometimes utilities break. Avoid the unnecessary associated costs, such as from spills or main breaks, by easily locating shutoff valves and underground assets. With mobile location apps, your teams can respond quickly and accurately to urgent situations.



A Comprehensive View of Assets at the Port of Rotterdam, the Netherlands

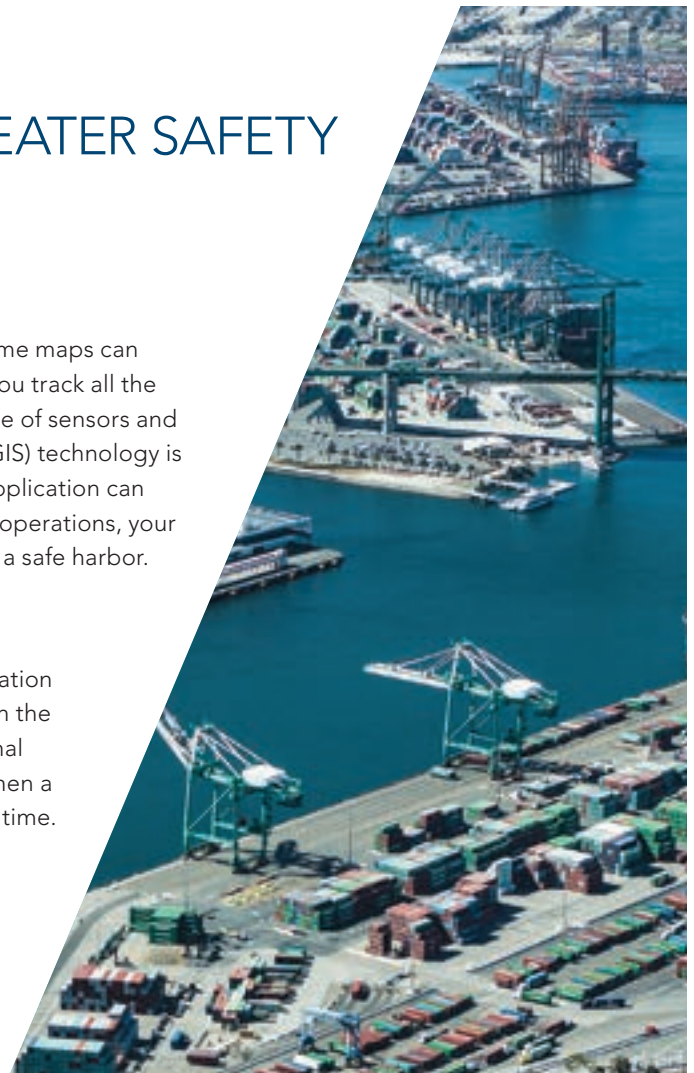
STRONGER SECURITY AND GREATER SAFETY

Build a Common Operating Picture

With a common operating picture, there are no surprises. Rich, real-time maps can differentiate between commercial vessels and pleasure craft and let you track all the moving parts within your port. With spatial integration of the multitude of sensors and surveillance technology in the port, geographic information system (GIS) technology is your eyes and ears on the ground in unfolding situations. The same application can also display your daily operations brief, so from VIP visits to dredging operations, your teams know what to expect. With a strong hold on security, you make a safe harbor.

Real-Time Information

Your job isn't to sift through big data. Let powerful maps distill information based on criteria you set so that you pull up the dashboards that mean the most to your decision making. Share information with shippers, terminal operators, and other maritime agencies for faster collaboration. So when a situation unfolds, you can review, respond, and return to normal in no time.



A Common Operational Picture for the Port of Long Beach, California



GREENER STEWARDSHIP

Be a Better Corporate Citizen

Proactive decision making helps you become a more proactive environment steward. Esri technology gives you a framework to understand and mitigate all aspects of your environmental footprint. Maps and spatial analytics help you easily maintain compliance, as well as respond to environmental urgencies.

Lower Impact

With GIS, your port can be a green asset to your community. Real-time monitoring tools help you visualize how your port affects its precious surroundings. You can build maps that show its impact—and efforts to mitigate that impact—on wildlife, air and water quality, and much more. Analytics lets you determine your optimal dredge placement areas and track emissions. You can also see where careful restoration is needed. Your whole port becomes more aware of its impact—and empowered to change it—with Esri technology.

Easier Outreach

Build trust with the public when you socialize your port's environmental stewardship. Web maps engage and educate the public about your environmental programs. Easy interactive interfaces let people explore how your port benefits the larger community. Tell the story of your port in the context of the community with Esri maps.

Across America, Communities Restoring Estuaries

Restore America's Estuaries (RAE) is a national (501)(c)(3) nonprofit organization established in 1999, as an alliance of eleven non-profit based environmental organizations working to protect and restore the vital habitats of our nation's estuaries. Click on the map and across below to explore the Atlantic coast to find out more about the RAE member organizations.

Tampa Bay Watch

Established in 1992, Tampa Bay Watch brings out in person, learn, volunteer, monitor, and risk assess, and participate in projects. We provide community involvement in the restoration and protection projects around the bay. There is a lot to do and we need your help. For more info click here.

Map Legend

- RAE Member Organization Office
- Organizational Project Sites
- Service Areas

Logos at the bottom include: Clf, Save the Bay, Tampa Bay Watch, and others.

A Story Map from Restore America's Estuaries, Showcasing Current Initiatives

BECOME A SMARTER PORT

Start Your Journey with Esri

Get the most out of your information. Esri is here to help. Learn how Esri's ArcGIS platform is simplifying and streamlining port management around the globe.

Visit esri.com/smartports.





Understanding our world.

Esri inspires and enables people to positively impact their future through a deeper, geographic understanding of the changing world around them.

Governments, industry leaders, academics, and nongovernmental organizations trust us to connect them with the analytic knowledge they need to make the critical decisions that shape the planet. For more than 40 years, Esri has cultivated collaborative relationships with partners who share our commitment to solving earth's most pressing challenges with geographic expertise and rational resolve. Today, we believe that geography is at the heart of a more resilient and sustainable future. Creating responsible products and solutions drives our passion for improving quality of life everywhere.



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