

Innovative Evolution in Transportation

Progetti, Soluzioni e Servizi **abilitati** dalla **tecnologia GIS**



Understanding our world.

Mauro Venanzi

Transportation Industry Manager

Mobile: +39 346 8453049

Email: mvenanzi@esriitalia.it



World leader in Geographic Information Systems

- Fondata nel 1969
- Basata a Redlands California
- Tra i 5 più grandi software vendor nel mondo



**25% delle revenue
In R&S**

- 12,000 Impiegati
- in 190 Paesi
- 1,600+ partners

Esri Italia

Fondata a Roma nel 1990

Uffici operativi a Roma, Milano e Pavia

~ 120 tra dipendenti e consulenti

> 2000 Enti e Aziende Clienti in Italia



Modello Misto

Diretto +Indiretto

Partner Network:
28 società distribuite sull'intero territorio italiano



Transportation Industry



Airports and Aviation

Improve management, safety and security, and regulatory compliance.



Roads and Highways

Plan, monitor, and manage strategic infrastructure more effectively.



Ports and Maritime

Use a proven platform for operations and asset management that also enhances sustainability and security efforts.



Public Transport

Optimize routes, understand assets in real-time, and communicate with web maps and apps.

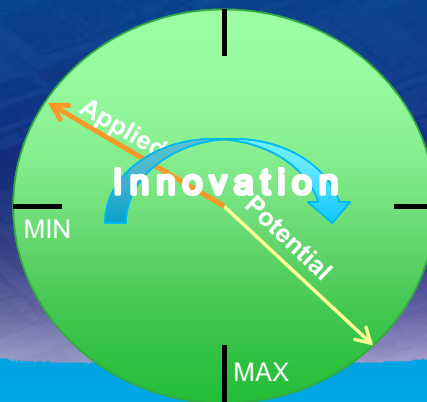


Railways

Manage assets, maximize throughput, monitor safety, and communicate with staff and the public.

WHY Location Intelligence

*The transportation industry is undergoing **tremendous changes across all sectors**, and it is through information technology, business and location intelligence, and performance management that companies will thrive in the next generation.*

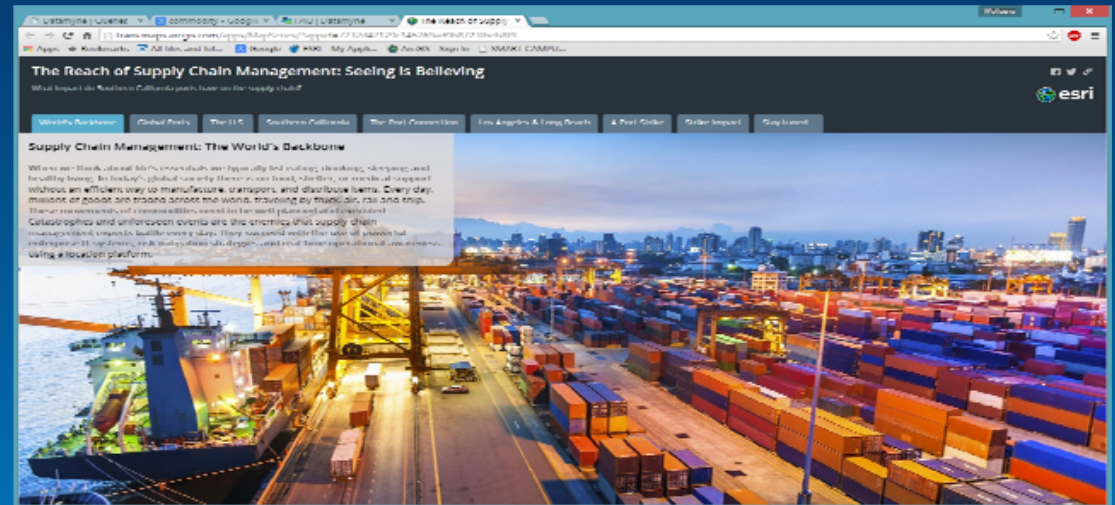
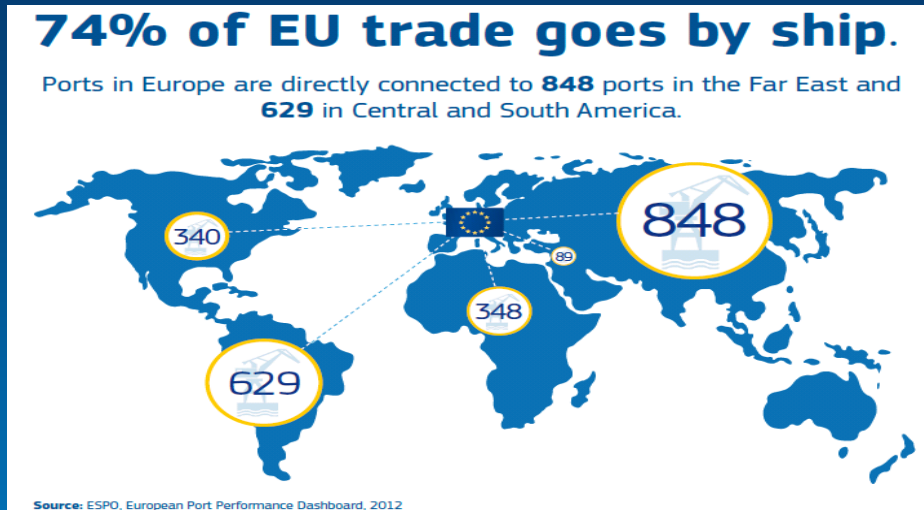


«Innovazione e' la straordinaria capacità di Sintesi di una meravigliosa proposta»

M. Venanzi

MIP Business School - MBA

Sintesi.....di soluzioni a necessità Globali



<http://esriurl.com/SCM2>

Nuove
Macro
Esigenze

Disponibilità
di
Soluzioni
Verticali

Piattaforme
Integrate
Orizzontali

come una piattaforma orizzontale
interseca vari moduli specifici
ed **estrae valore informativo**
applicato alle specificità richieste

Porti e Logistica, innovazione evolutiva

Quale e' il ruolo di un sistema informativo territoriale ?

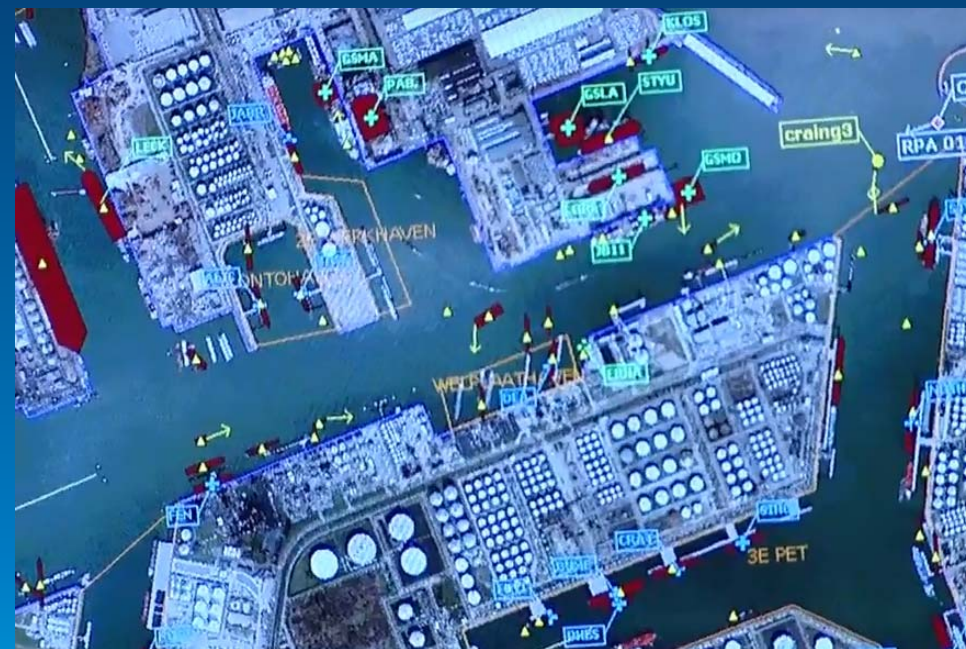


Ports and Maritime

Use a proven platform for operations and asset management that also enhances sustainability and security efforts.



Porto di Rotterdam Demanio Digitalizzato integrato per la gestione Dello Ship Landing real time nel contesto **Smart City Port**



Video

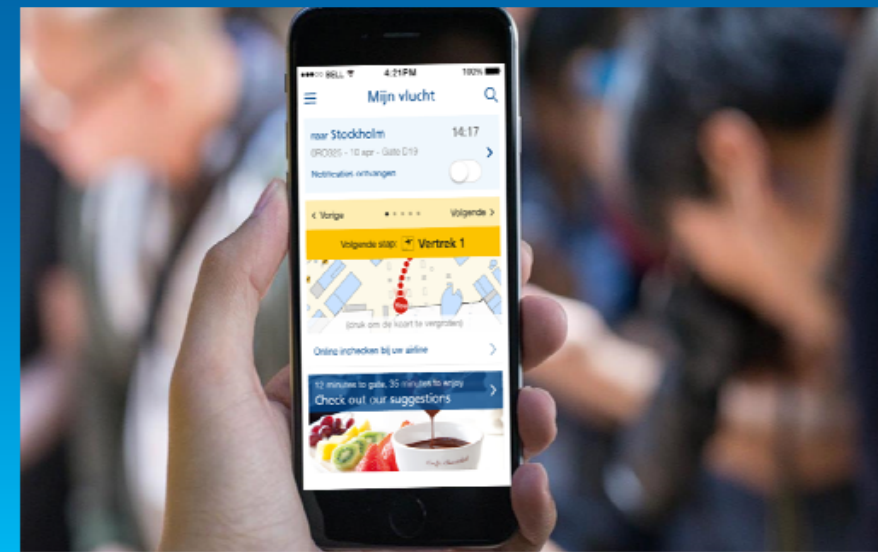
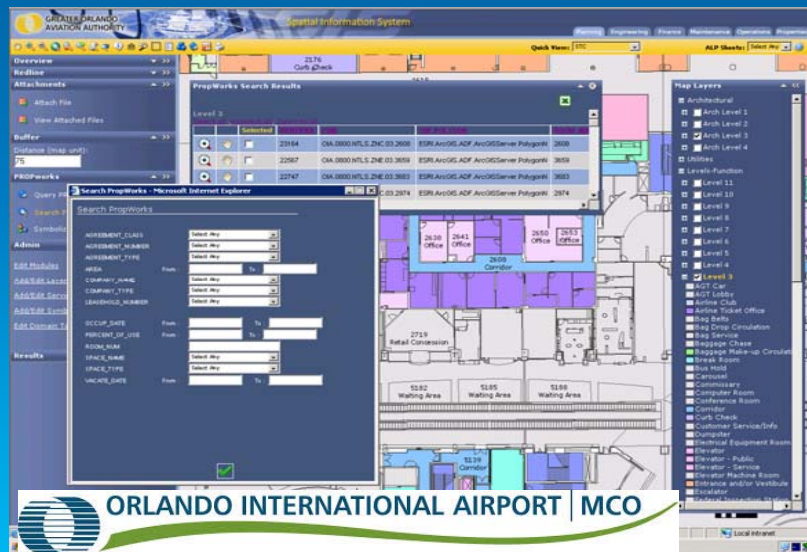
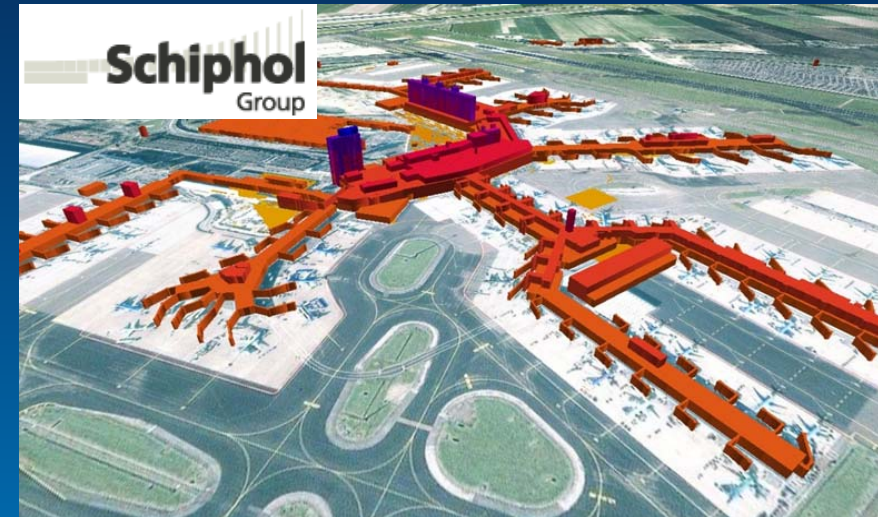
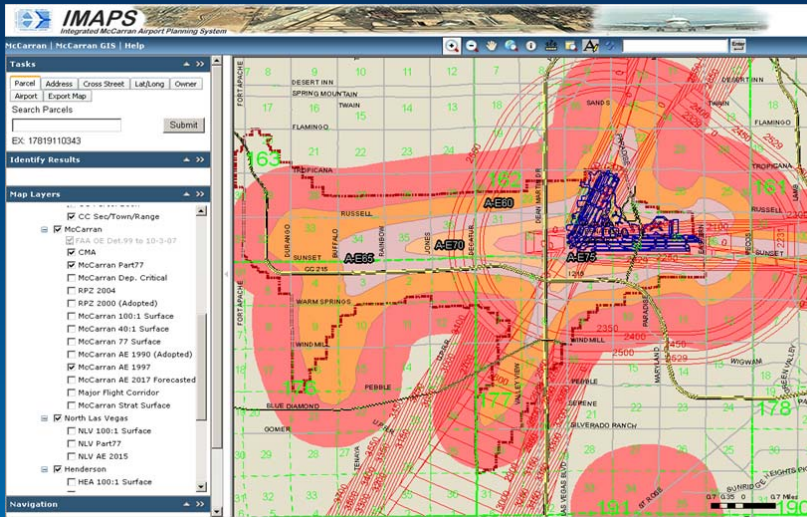
In chiave odierna e' un meccanismo di **cross-correlazione di dati** informativi multi-sorgente al fine di estrapolare il **valore semantico**.

Vision for infrastructure at Manchester airport as a smartcity



Airport Spatial Data Warehouse				
DB Elements	Buildings Floor & Lease Plans	Sub-Surface Utilities	Airport Layout (ALP Layers/Surfaces & Obstacles)	General Base Maps
Data Layers	Properties	Water	Runways & Taxiways	Topographic data
	Buildings Footprints	Waste Water	Aprons & holding Pads	Geotechnical Data
	Floor Plan Details	Storm Water	Roads	Aerial Imagery
	Leased/Leasable Spaces	Fuel	Markings	Roadways
	Assets	Gas	Navigational Aids	Noise Management Areas
	Building Systems	Electric	Protection Surfaces	Flight Tracks
	As-Built drawings	Communications	Security/Perimeter Fence	Obstacles
Business Applications	Lease Management	Maintenance Systems	Training	Reports
	Facility Management	Capacity Planning	Certification	Analysis
	Safety + Security Management	Emergency Response	Capacity Planning	Presentations
	Leased/Leasable Spaces	Inspection	Safety Inspection	General Maps
	Assets	Reporting	Security Management	Noise Management
	Building Systems	Cost Analysis	Airspace Planning	Flight Tracks Analysis
	As-Built drawings		Emergency response	Obstacles Management

Integrated Airport Planning System



Temi Chiave

Innovazione Evolutiva Tecnologica

Convergenza GEOSpaziale: SURVEY+ CAD+GIS.....BIM

Progettualità Integrata: Trasporti+Lavori Pubblici

Manutenzione Olistica: Reti+Asset management+Planning

Continuità Spaziale: Indoor+Outdoor /
Superficiale+Sottosuperficiale

Intermodalità Totale: Ferroviario+Stradale+Eco Sostenibilità

Mobilità Ultimo Miglio: Mezzi Alternativi e Sincronismo

La produzione e
disponibilità di Dati
incentiva e promuove il
posizionamento strategico
di sistemi IT-Geocentrici.

La produzione e disponibilità di
soluzione Smart Verticali
promuove ed incentiva lo sviluppo
di sistemi IT GeoCentrici.

Tecnologia orizzontale abilitante

Blended GIS : Smart Devices, PC, WEB, Mobile

Operation, Asset Management: Reti, Strutture, Impianti

Data Management: Customer, Mobile, Uso, Strutture

Real Time GIS: Controllo e Gestione

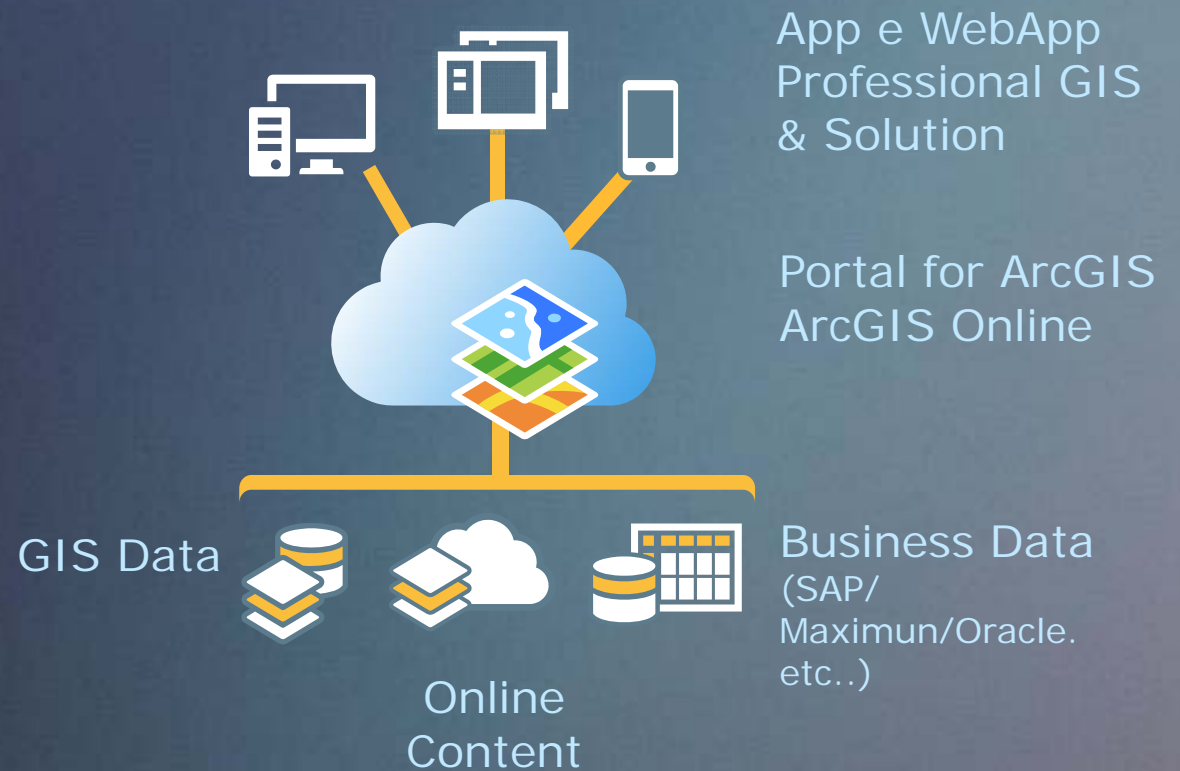
Standard, interoperabilità, scalabilità

ArcGIS

Una piattaforma Enterprise

- Mappe
- Applicazioni
- Analisi
- Real time & Big Data
- Condivisione & Open Data

Con il web GIS Si
creano e condividono
Contenuti



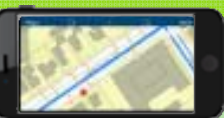
Apps ▶

ArcGIS disponibile ovunque

Applicazioni su campo
Online / offline

Navigator

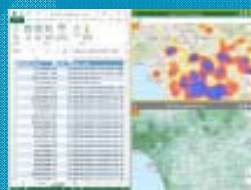
Workforce



Collezione Dati

Survey123
Rilievi e Conteggi
di traffico

Maps for Office



Office

Dashboard



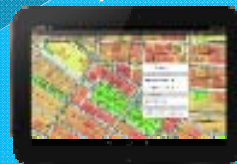
ArcGIS Earth



Drone2Map



Explorer



Visualizzatore
Big Data



Web App
Builder



Template
Web App

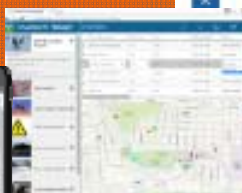


Public

Open Data



Story Maps

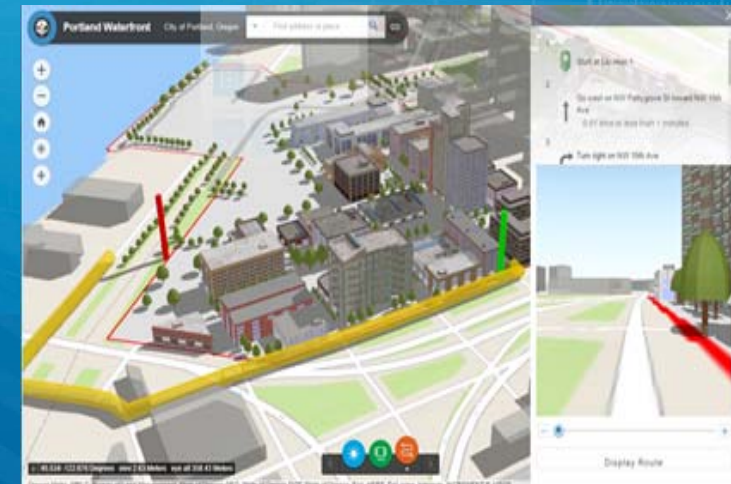
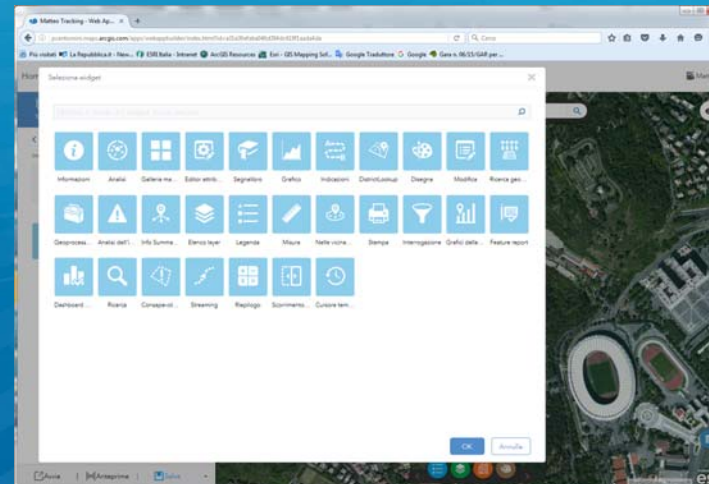
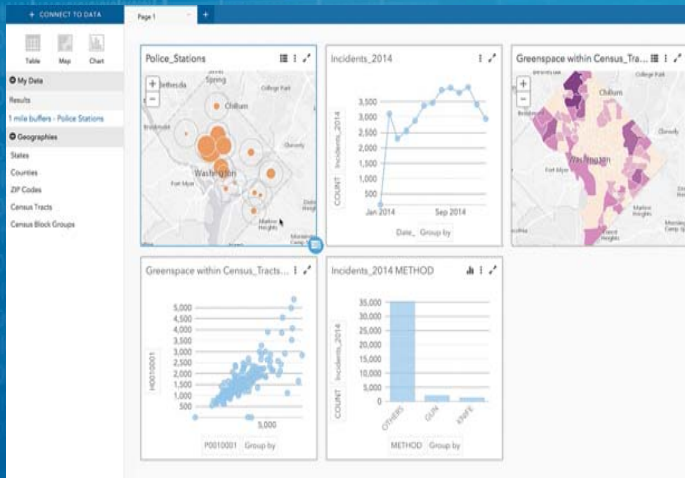
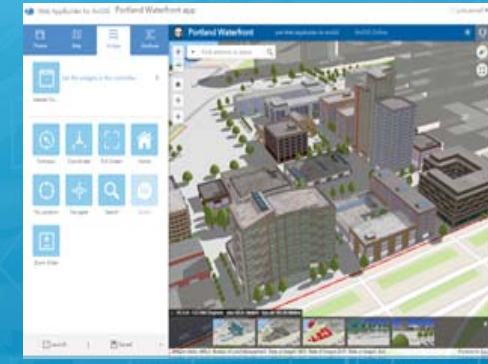
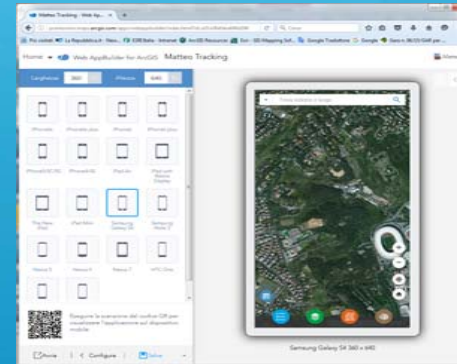
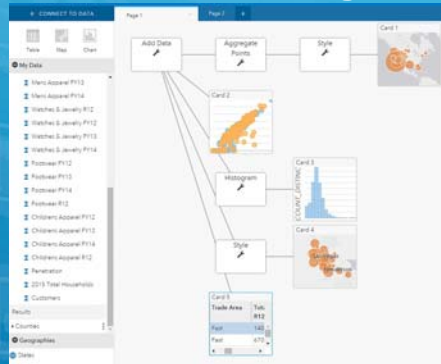


Crowdsourcing

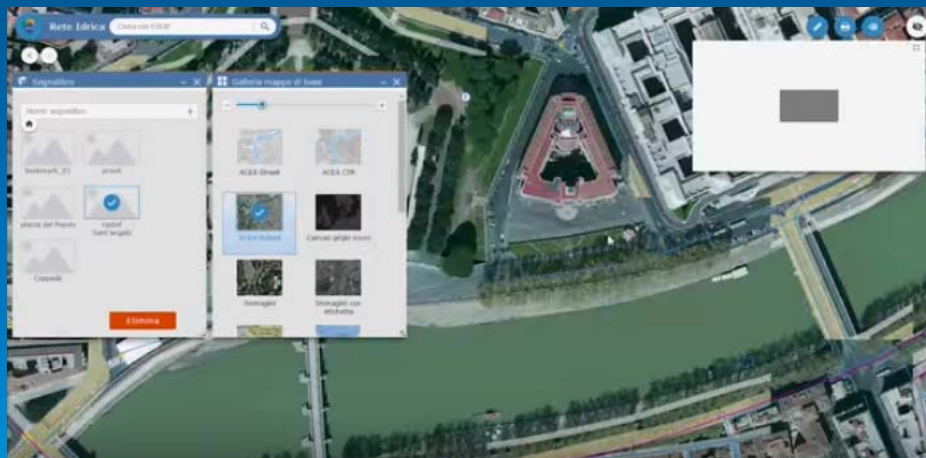
Easy, Powerful, and Ready-to-Use

Portal for ArcGIS ▶ Web AppBuilder Template, Widgets, 2D/3D

Insights



Modelli di rappresentazione *On-The-Fly*



Ambito Applicativo: **Gestionali GIS Centrici Integrati SAP**
...in estrema sintesi

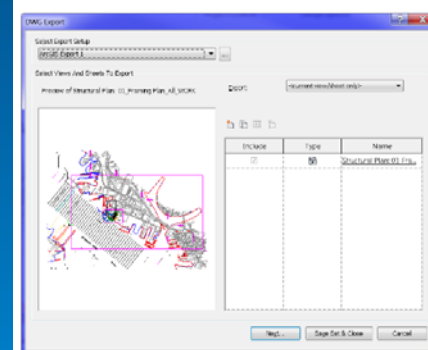
An Esri Forum: GIS and BIM Post Event Resources

Geovation Hub | 30th November 2016

Spatial analytics
Logistics and networks
Ability to model and forecast
Use throughout lifecycle
Enable sharing of information
Visualization



Next step, export your 2D. R > Export > CAD Formats > DWG gets you here:

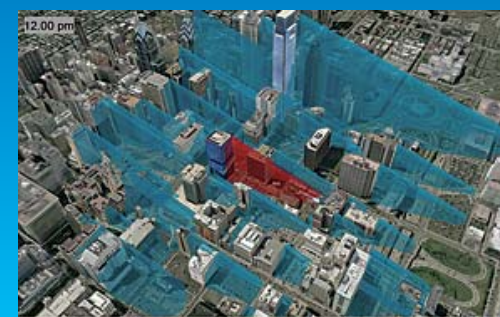


Revit DWG Export Dialog

Revit ArcGIS Example



Revit-ArcGIS Example - Resulting GIS



ArcGIS si propone come il migliore interlocutore di Revit



Public Transport



San Diego Transportation Innovations

See some of the transportation projects and developments that help keep people moving in the San Diego region.

A story map



Sprinter Light Rail

The Sprinter is a 22 mile light rail route between Oceanside and Escondido that provides an alternative to busy State Route 78. The 15 stations include Palomar College and Cal State San Marcos. Launched in 2008, the Sprinter's average weekday ridership in 2012 was 7,800.

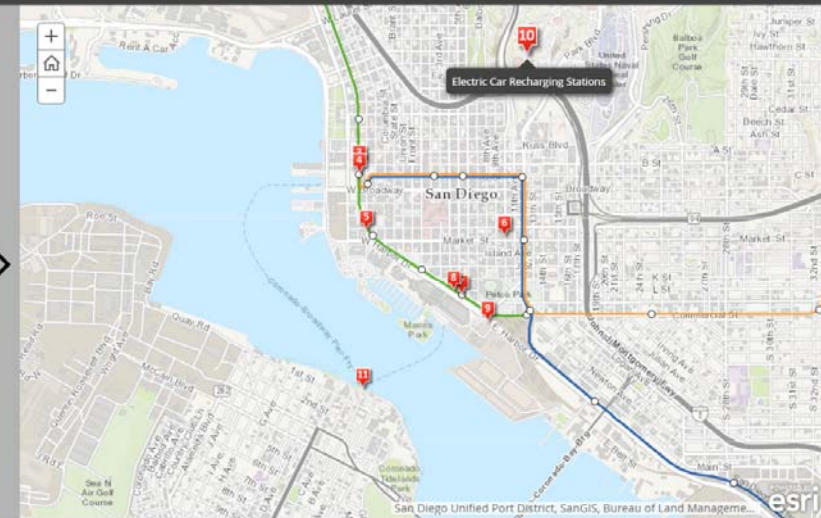
Sprinter train near Cal State San Marcos. Photo: North County Transit District



Electric Car Recharging Stations

There are several hundred electric vehicle recharging stations in San Diego County, including five solar-powered stations at the San Diego Zoo. The location pictured here is at the Aerospace Museum in Balboa Park, where a Nissan Leaf and a Car2Go Smart Car are plugged in.

Photo: Tim Craig / Esri



New Transcontinental Rights



San Diego Airport Terminal 2 Expansion



Coaster Commuter Rail



Amtrak Pacific Surfliner



Downtown Quiet Zone



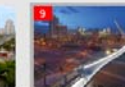
Car2Go Car-sharing



San Diego Trolley



San Diego Trolley Green Line



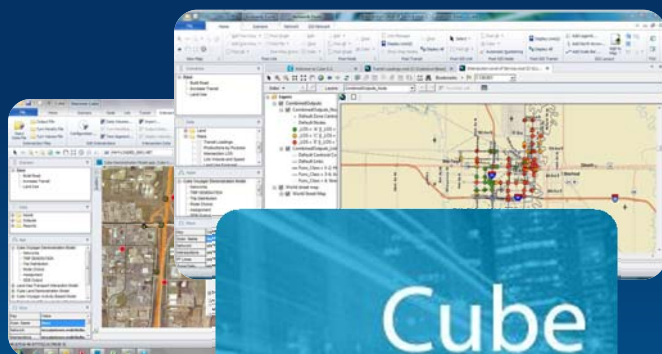
Harbor Drive Pedestrian Bridge



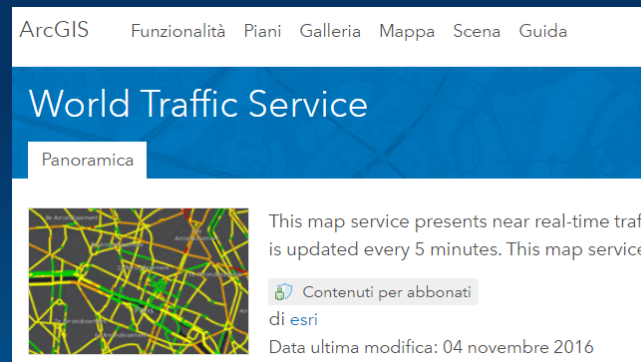
Electric Car Recharging Stations



Coror

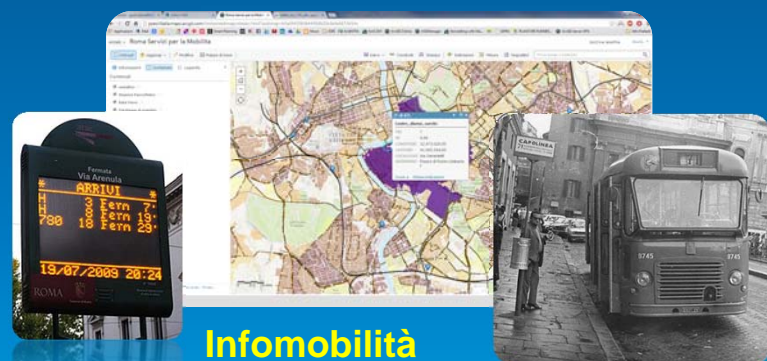


Pianificazione del Trasporto Pubblico



Traffico Real Time

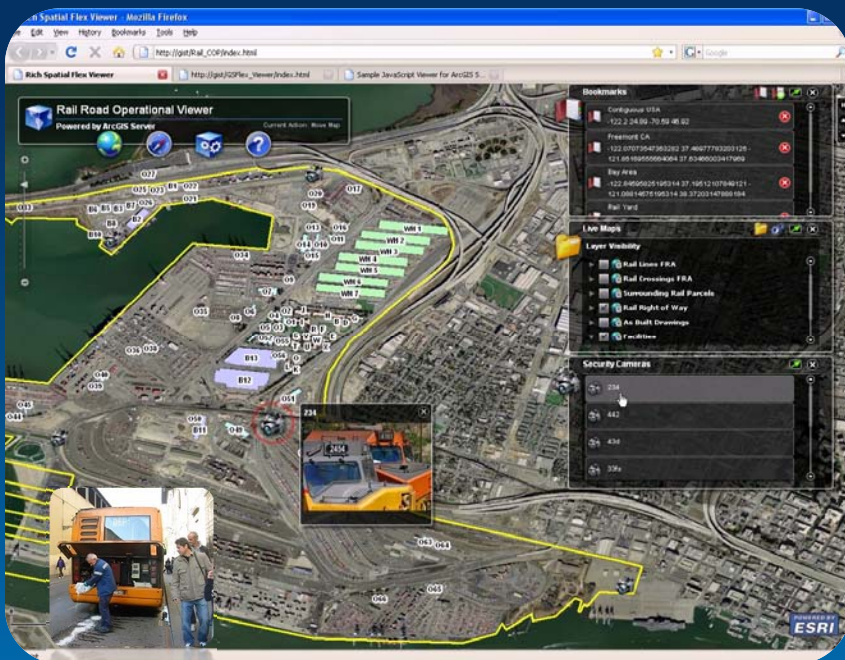
Dati Storici
Dati da sensori locali



Infomobilità

Geoform gratis





Fleet Survey: tempi di sosta, tempi di tratta



Monitoraggio tratta:

Remuneratività

Densità di Mezzi

Integrazioni con altri sistemi per
Assegnazione dinamica del mezzo
alla tratta



**Rilievi e conteggio di traffico
e TPL**



Real Time GIS

Sensori IoT
Data Streaming



Check In/ Check Out

Inizio Lavori su Strada
Catasto Segnaletica ed Asset Stradali

Viaggia con Atac



A+

A-



Trova linea



Tempi di attesa



Ricerca fermate



E-Commerce



Link



Nodi di scambio



Atac Risponde



Home



News



Preferiti



Percorso



Impostazioni

VIAGGIA CON ATAC

Strumenti

Trova Linea

Ricerca Linea	<input type="text" value="Inserire la linea"/>	<input type="button" value="Trova"/>
Nome Fermata	<input type="text" value="Inserire il nome della fermata"/>	<input type="button" value="Trova"/>
Codice Impianto	<input type="text" value="Inserire il codice impianto"/>	<input type="button" value="Trova"/>

U 85
termini **M**
(Normale)

Altri percorsi della linea

Vedi Percorso Completo:

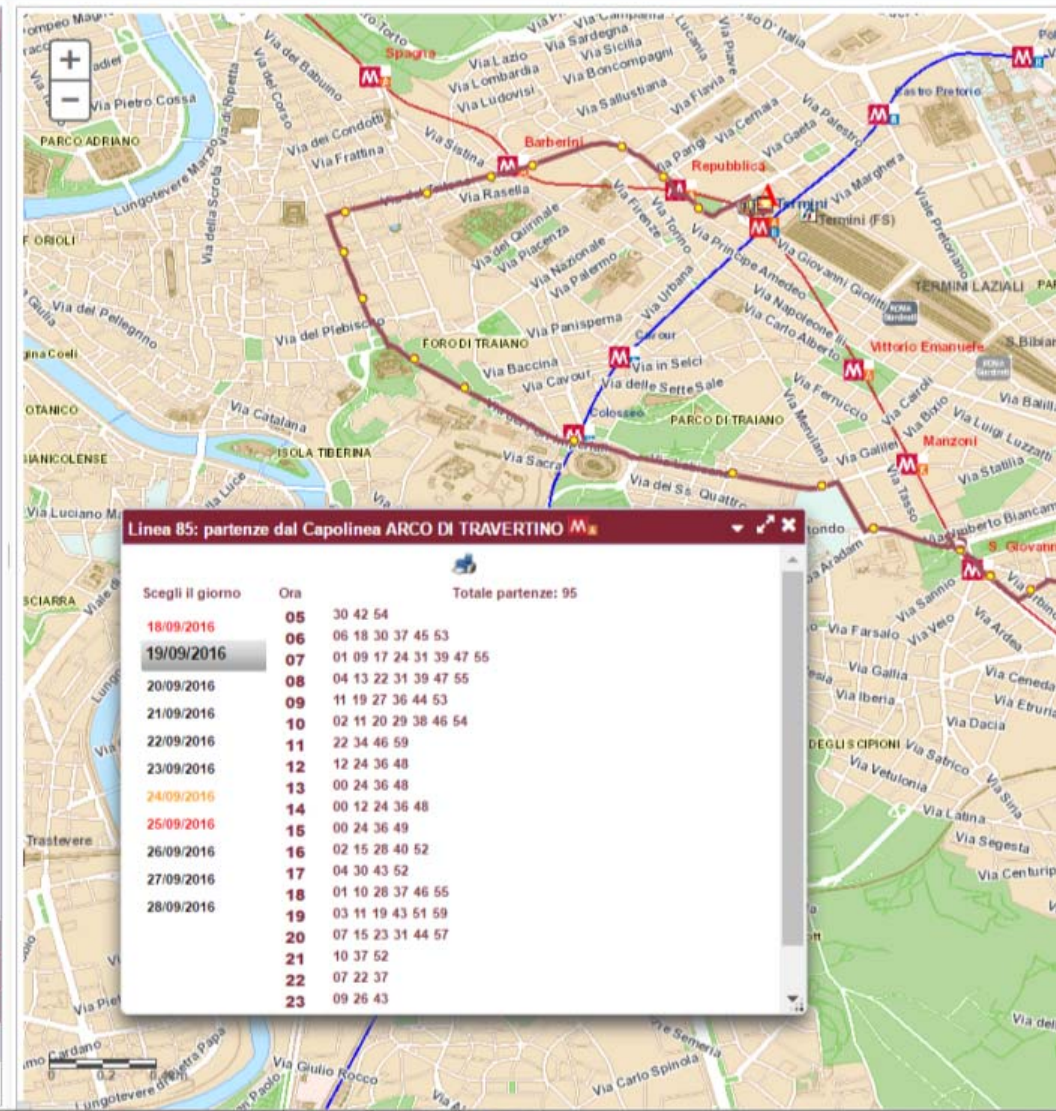
Cliccare sulla fermata per ulteriori informazioni.

- 81906 - ARCO DI TRAVERTINO
- 74018 - GENZANO/VELODROMO
- 70404 - ALBANO
- 77348 - L.GO COLLI ALBANI
- 70406 - NUMITORE
- 70407 - S. M. AUSILIATRICE
- 70408 - TUSCOLANA/CLELIA
- 70409 - TUSCOLANA/AMELIA
- 70410 - TUSCOLANA/ASSISI
- 70411 - MONSELICE/STAZIONE TUSCOLANA
- 70417 - RAGUSA
- 71218 - TARANTO/LUGO
- 70416 - TARANTO/CASALMAGGIORE
- 70418 - TARANTO/MONZA
- 70420 - RIMINI
- 70422 - PLE APPIO
- 71223 - PORTA S. GIOVANNI
- 70424 - P.ZA S. GIOVANNI IN LATERANO
- 70863 - LABICANA/MERULANA
- 70864 - LABICANA
- 70340 - COLOSSEO

Calcola Percorso

News

Legenda





PePee Bus:

Servizio di Alert Real time con Area di Sensibilità

Modulo AVL (Optionale)

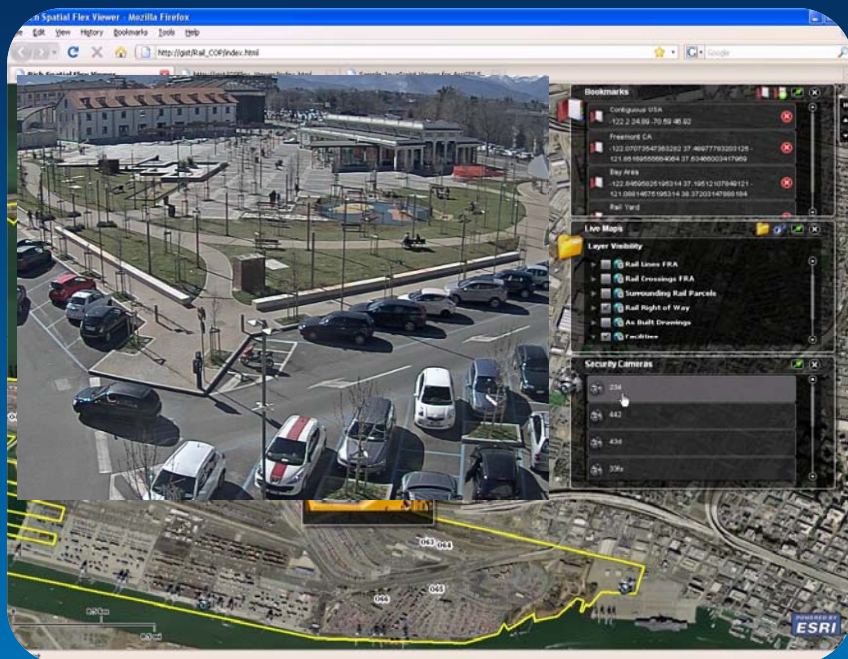
Modellini Scuolabus Parlanti

Estensioni as default: App/Tablet/Mobile/Web



GeoEvent
GIS Data Streaming
Real time





ZTL Real Time: Track locator Real Time, accessi, Tempi

Route Planner Multimodale

Privato
Pubblico
Eco Sostenibile
Misto



Esri
Multimodal
Network Analyst

100% Configurabile secondo le
esigenze Dell' Agenzia Locale.

Bike&Ride,
Park&Ride,
Car Sharing/Pooling

mobilità

ROMA

Agenzia per la mobilità

CERCA PERCORSO

SPORTELLO ONLINE

Home

Progetti

Open data

Dataset

DATASET

Dataset geografici

In questa pagina trovate i link per scaricare i dataset messi a disposizione dall'Accademia di Roma. Questi dataset utilizzano il formato GeoServices REST.

Linee bus e tram

Rete del trasporto pubblico

La rete viene generalmente aggiornata un paio di volte a settimana. Il dataset

Risorse su strada

Colonnine di ricarica elettrica

Impianti semaforici

Parcheggi di scambio

Parcheggi Car Sharing

stalli a Ottobre 2015

nuovi stalli da Novembre 2015 (l'espansione)

Ciclabilità

Piste ciclabili

ECC 2014

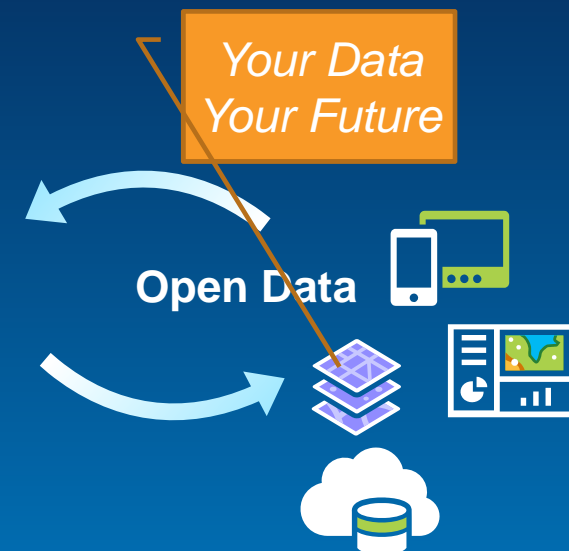
Stampa

Misura

Trova luogo o indirizzo

ESISTENTI OPEN DATA - CICLABILI ESISTENTI database completo 2016 v3 (101 feature, 0 selezionato/1)

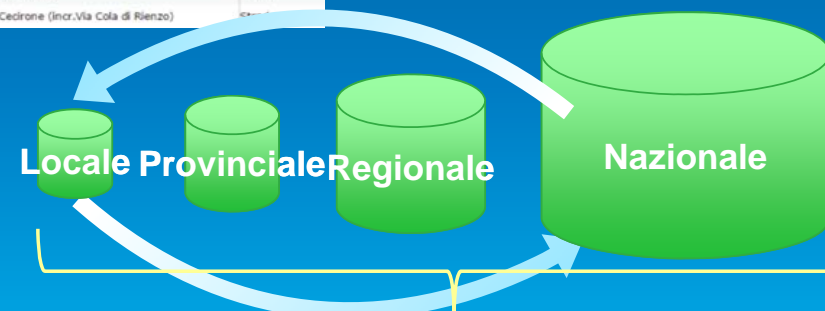
D_PISTA	NOME	LUNGHEZZA	DA	TIPO
2,00	Dorsale Aniene	8.491,16	Ponte Milvio - Villa Ada - Ponte Nomentano	Strada
4,00	Pisana	1.377,64	Via della Pisana (Incr.Via del Ponte Pisano)	Strada
0,00	Ponte Risorgimento - Villa Borghese - Villa Ada	3.483,54	Ponte Risorgimento	Strada
9,00	Dorsale Tevere	32.837,68	Castel Giubileo	Strada
7,00	Prati	350,11	Via Celione (Incr.Via Cola di Rienzo)	Strada



Catena produzione del Valore



Modello di **delega prossimale**



«I dati centralizzati dovrebbero essere conseguenza di strati informativi gestiti localmente e via via geo-distribuiti» (Veneto)



DATA

Insights for ArcGIS

Welcome to the New Spatial Analytics

Get it today →



Explore, Analyze, Iterate



Visualization and Analysis



Drag-and-Drop Visualization



Add Demographic Data



Guided Workflows



Share and Communicate



Connect to Data Sources



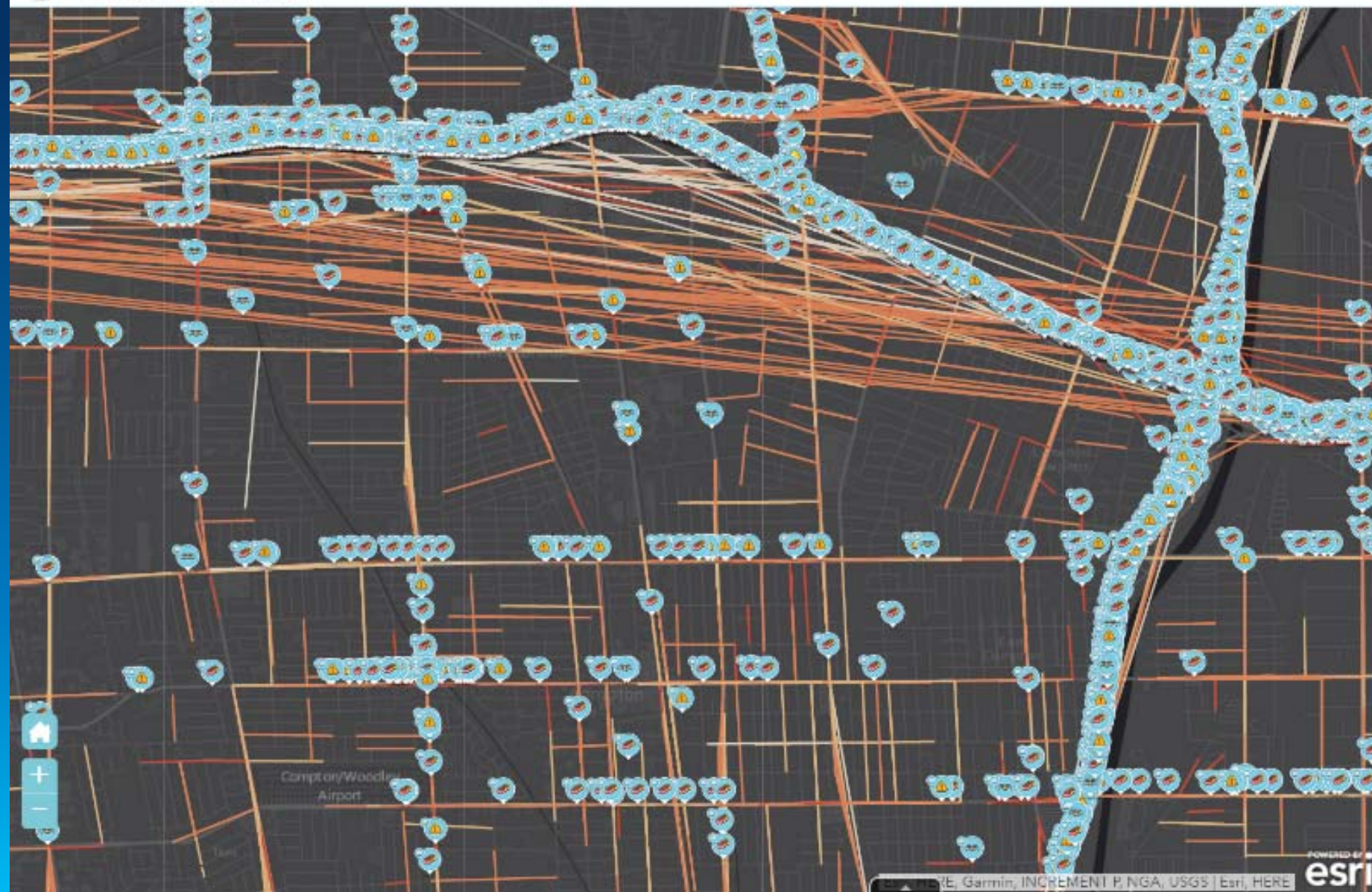
Record and Rerun Workflows

Real-Time Sensor Feeds

Elaborazione e Porcessing

Storicizzazione





Legenda

Alerts (City Level Detail)

- JAM
- HAZARD
- ACCIDENT
- ROAD CLOSED
- MAP CHAT

Traffic Jams

Traffic Level

- 5
- 4
- 3
- 2
- 1



GIS Services



Geco – Geocoder

- Normalizzazione “single line” (con casella di ricerca unica) di alta qualità
- Suggerimenti durante la digitazione (smart)
- Elevata tolleranza a errori di digitazione
- Riconoscimento di forme alternative, abbreviazioni ecc...
- Deploy multi piattaforma
- Certificazione di indirizzo
- Civici Puntuali

Estrazione Media di Valore: 30% investimento Dati

Route – ReRoute

- Real time GNSS data Processing
- Servizi correzione della posizione
- Ricostruzione dinamiche dei sinistri
- Rilievi della posizione certificati



Geocodifica
GeoFence
Finding

Reverse Geocoding
Closest Facilities
Data Enrichment

.....

.....



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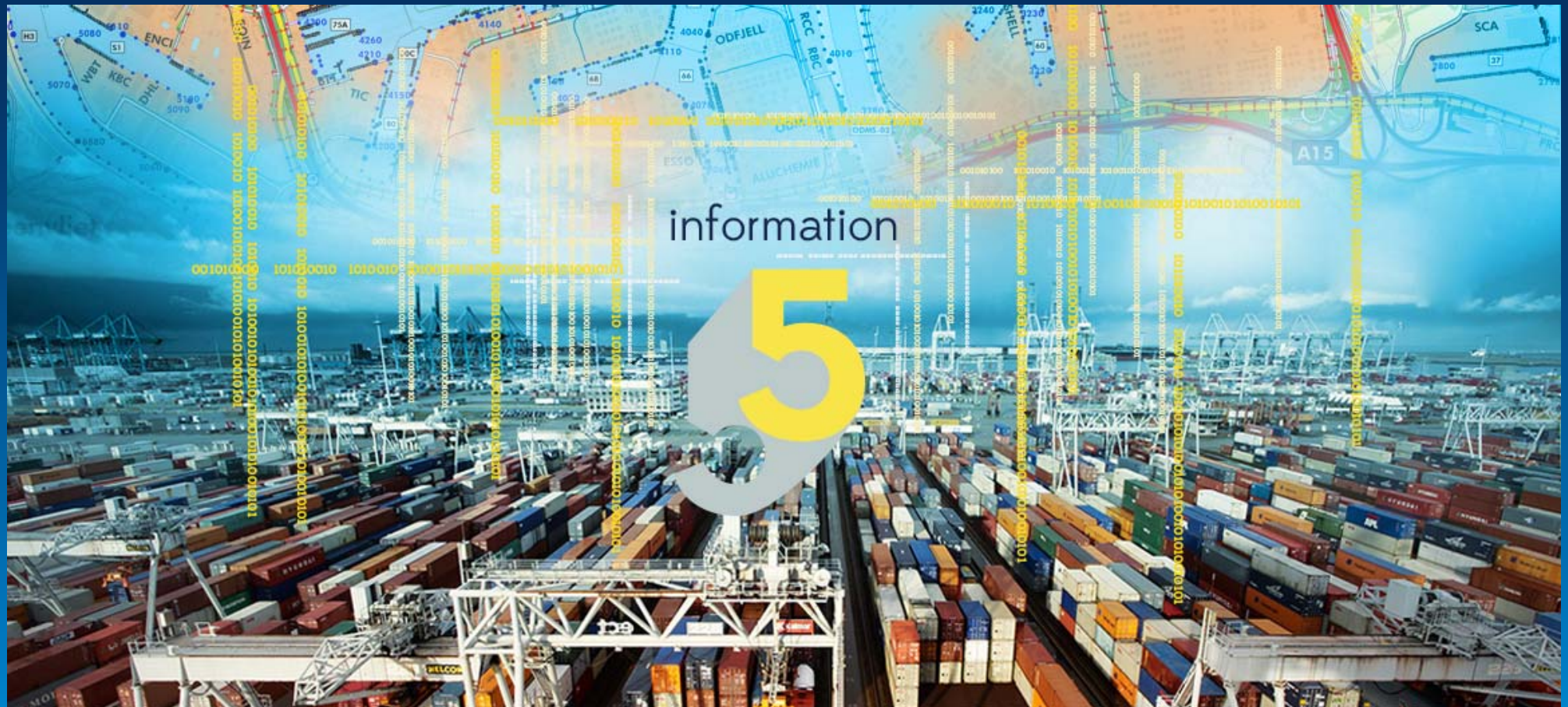
Email: mvenanzi@esriitalia.it



Location Platform

Ports & Maritime



Business HUB
Services Switch







Yes, Information Can
Moving Through the Port With Information

HOME
GALERIJ
KAART
GROEPEN
MIJN CONTENT
MIJN ORGANISATIE

Michielse,

Galerij Asset Management
Galerij DHMR
Galerij POR-Online
Galerij Port Development

Welkom op het PortMaps portaal van het Havenbedrijf Rotterdam. Het PortMaps platform stelt zich tot doel om alle geo-informatie gerelateerd aan de haven beschikbaar te stellen. Via het PortMaps portaal heeft u direct toegang tot de verschillende informatie producten en de PortMaps Viewer.

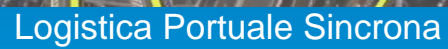
Heeft u vragen? Stuur een berichtje naar portmaps@portofrotterdam.com



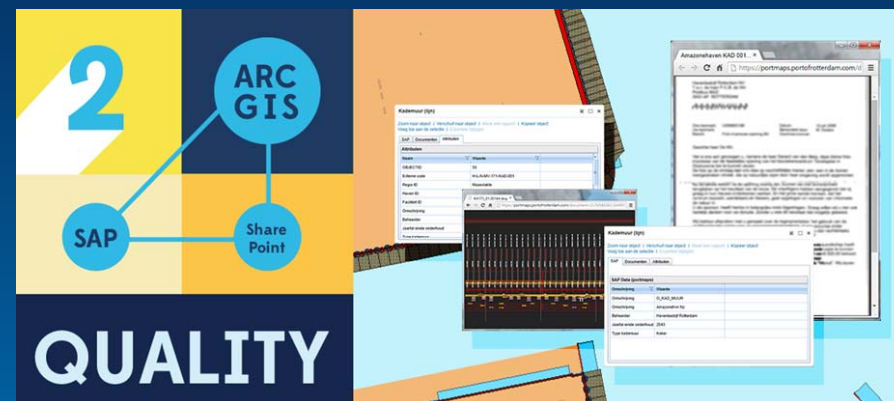
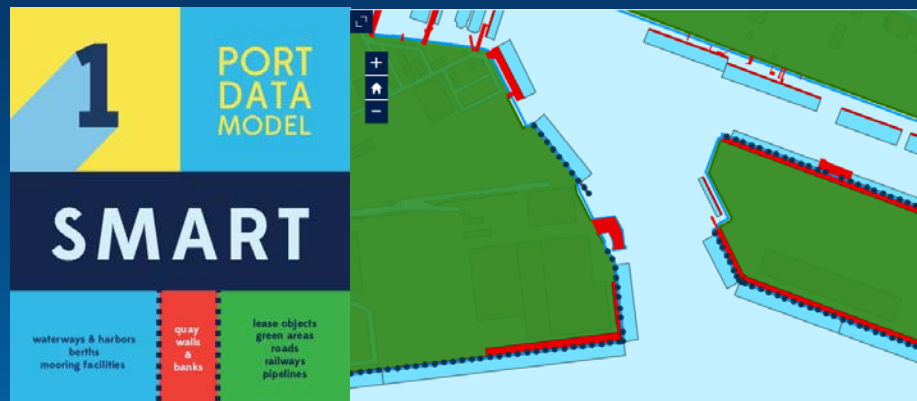
PortMaps



Inside



Le chiavi del successo Esri



A single window information to gather information

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