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State Updates

Kevin Coyne



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MDOT State Highway

Geospatial Technologies





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MDOT State Highway <u>Geospatial Technologies</u> JavaScript/HTML5 Applications

- 1) Asset Management Release FY18Q1
 - Asset Management entails taking a strategic approach to better manage our physical transportation infrastructure based upon asset condition data and performance expectations.
 - •Goal: obtain the best results, or performance, for the preservation, improvement, and operation of infrastructure assets given the resources available.
 - The Asset Management Dashboard showcases the conditions of our bridges and pavement, as well as our system preservation and rehabilitation efforts.



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MDOT State Highway <u>Geospatial Technologies</u> JavaScript/HTML5 Applications

- 2) SHA Enterprise GIS (eGIS) Portal Internal, Release FY18 Q1
 - SHA is migrating their eGIS Portal from Flex API to JavaScript API
 - Visualizes, Collects, and Maintains assets and transportation data for 500+ users with 100+ map services and 50+ widgets





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MDOT State Highway <u>Geospatial Technologies</u> GIS Applications

- 1) Roads and Highway Implementation
 - Working with NG911 community to minimize redundant efforts.
 - Meet with all counties and the City of Baltimore the last two months to provide a project update and schedule moving forward for local integration.
 - Deploying Esri Roads and Highways internal at SHA into production later this summer.





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MDOT State Highway <u>Geospatial Technologies</u> ArcGIS Online and Story Maps

1) <u>eRoad Ready</u>

• The Maryland Department of Transportation (MDOT) crews maintain 17,824 lane miles of the state's highways and toll roads. Use this interactive map to view construction projects near you, view CHART cameras and news releases as well as the Project Life Cycle data.





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MDOT State Highway <u>Geospatial Technologies</u> ArcGIS Online and Story Maps

- 2) Maryland's Freight Story FY18 Q1
 - Easier communication of freight story
 - Visualize freight network and proposed network
 - Visualize commodities, congestion and reliability





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MDOT State Highway <u>Geospatial Technologies</u> ArcGIS Online and Story Maps

- 3) Performance Based Management Portal FY18 Q1
 - Moving Ahead for Progress in the 21st Century (MAP-21) is a milestone for the U.S. economy and the Nation's surface transportation program. By transforming the policy and programmatic framework for investments to guide the system's growth and development, MAP-21 creates a streamlined and performance-based surface transportation program and builds on many of the highway, transit, bike, and pedestrian programs and policies established in 1991.





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MDOT State Highway <u>Geospatial Technologies</u> Data Management Projects

1) MDOT State Highway is partnering with other transportation business units within MDOT and with DoIT to establish a real property database inventory. SHA is striving to decrease the time it takes to sell excess land.





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MARYLAND DEPARTMENT OF





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Municipal and County-Owned Real Property Inventory

The Maryland Department of Planning is beginning work on an inventory of lands owned by municipalities and counties. If your county or municipality would be interested in being a pilot participant, verifying property records in Planning's web application, please contact Gary Maragos at

gary.maragos@maryland.gov



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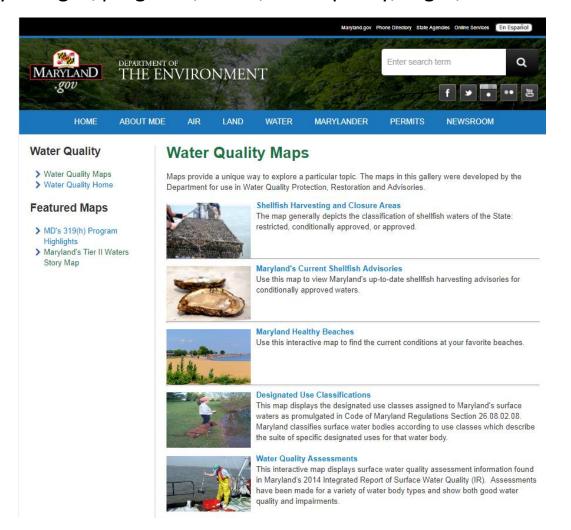
MDE Water Quality





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http://mde.maryland.gov/programs/water/waterquality/Pages/WaterQualityMaps.aspx







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Maryland's Tier II High Quality Waters

This map displays Maryland's Tier II high quality stream segments and their drainage areas/catchments.



Maryland's Tier II Waters Story Map

This interactive story map provides an introduction to Maryland's Tier II waters which are the designated high quality streams and their watersheds, through text, maps, photos, and diagrams.



TMDL Map

These maps display watersheds where TMDLs have been developed.



Maryland's 8-Digit Watershed Maps

This map displays Maryland's Watershed Maps.



Maryland 319(h) Program Projects

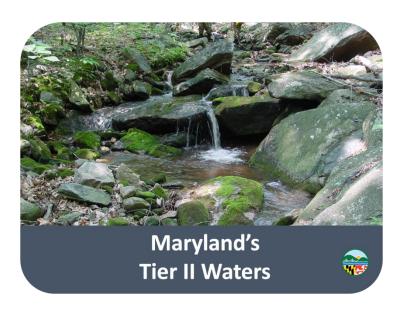
Learn how Maryland is reducing nonpoint source pollution with an interactive application highlighting Maryland's 319(h) Nonpoint Source Program under the Clean Water Act. Navigate the story map to learn more about 319(h) funded projects that provide measurable improvements in water quality and habitat.





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Maryland's Tier II Waters Story Map



This interactive story map provides an introduction to Maryland's Tier II waters which are the designated high quality streams and their watersheds, through text, maps, photos, and diagrams.





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Department of Information Technology





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MD iMAP 3.0

- Next generation of MD iMAP platform running on Esri's ArcGIS Enterprise 10.5.1
- Promoting authoritative data sharing among State agencies via Portal for ArcGIS
- Centralization of GIS infrastructure within DoIT Enterprise
- Greater level of support to State agency GIS depts.
- Enhanced performance and scalability
- Cost savings
- Coming Q4 2017/Q1 2018



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GIS SaaS Master Contract

- RFP Under review Award expected in December 2017. Purchasing vehicle available to locals
- Three Year Contract with Two 2 Year Options
- Functional Areas
 - FA I: SaaS GIS and Open Data Cloud Services
 - e.g. Cloud-based GIS or Open Data platforms, GIS-based Enterprise Asset
 Management, Location-based Analytics
 - FA II: SaaS GIS Data Services/Subscriptions
 - e.g. Data Feeds for Weather, Traffic, Imagery, 3D, Demographic Data,
 Business Data
 - FA III: SaaS Training and Support related to FA I or II purchases



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Statewide Imagery Program

Western Shore Imagery Project 2017

- Acquisition Completed
- Aerotriangulation Completed
- Pilot area review to be completed by 7/28
- Ortho processing to be completed by 11/27
- Independent QA/QC to be completed by 12/11
- Delivery and post to MD iMAP

http://imap.maryland.gov/Pages/imagery-status.aspx





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Statewide Training Program

- In-Person Courses
 - Thinking Spatially <u>Available Online!</u>
 - Intro to ArcGIS Desktop and MD iMAP
 - Intermediate ArcGIS Online and MD iMAP
- ArcGIS Pro course now available!
- Calendar of trainings and seats available on <u>MD iMAP Portal</u>



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Statewide LiDAR Program

- Under Development
- Goals
 - Establish Regular Collection Cycle
 - Create Standard Collection Products
 - Collaborative Partnerships with Federal/State/Local Governments, Non-Profits, Academic/Research Institutions, Private Sector
- DoIT is preparing to submit application for USGS 3DEP Grant





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MD iMAP LiDAR Downloads

- DEM Downloads
 - Via Dropbox
 - Include metadata, overview pyramids, and bare earth DEMs
 - Downloads by County
- Point Cloud Downloads
 - Via LiDAR Download Tool Now Available
 - Via Dropbox LAZ files by county Now Available
- Topography Viewer Updated
 - Added LAZ Block Download Grid with links to Dropbox downloads
 - Links to LiDAR & DEM metadata
 - Open Street Map now available as basemap layer



LiDAR - http://imap.maryland.gov/Pages/lidar-download.aspx



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GIS Data Catalog

- New Look, Feel, and Experience
- Feature Datasets, Maps & Apps, Training, Open Data Initiatives
- Geo Hubs Coming Soon
 - Promote data and apps of Government agencies
 - Federate with local GeospatialOpen Data
 - Initiative specific pages









http://data.imap.maryland.gov



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Open Data Portal

- Search for, Share, and Download data in a variety of formats
- Comment on datasets and submit requests for new datasets
- Featured Datasets
 - Data Freshness Report
 - Real Property Assessments
- Federated with local jurisdictions open data portals
- Provide local jurisdictions with less than 100,000 people with your own open data site
- Links to GIS Data Catalog datasets



https://data.maryland.gov



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MD iMAP - New Applications

http://imap.maryland.gov/Pages/map-gallery.aspx

- Environment
 - Maryland's Tier II Waters Story Map (MDE)
 - Integrated Report (IR) Water Quality Assessments (MDE)
 - Total Maximum Daily Load (TMDL) Maps (MDE)
 - Total Maximum Daily Load (TMDL) Watershed Maps (MDE)
- Growth, Planning, and Revitalization
 - Maryland FY18 Enacted Capital Budget Map (DoIT/DBM/MDOT)
- Health and Human Services
 - Maryland Radon Data (MDH)
- Transportation
 - e-Road Ready Projects 2017 (SHA)





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MD iMAP - New & Updated Data

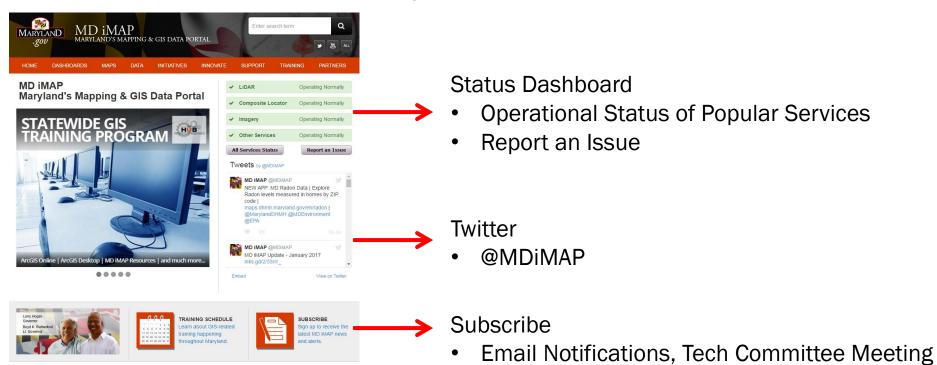
- Protected Lands Acquisitions Updated with 2017 data
- Archived Protected Lands Acquisitions Updated with 2016 data
- •Incentive Zones Updated Sustainable Communities
- •Housing Designated Areas New Layers: Difficult Development Areas, Small Difficult Development Areas, Rural Areas
- •Critical Areas Updated for Calvert County & Greensboro
- •Shoreline Changes Updated for Anne Arundel, Baltimore, Calvert, Harford & Prince George's counties
- •Transit Updated MTA bus stops & routes for BaltimoreLink
- •Campus Facilities Updated University of MD, College Park





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MD iMAP – Stay Updated & Involved



Monthly MD iMAP Technical Committee Meetings All are welcome!

