

Ecopia's 3D Nationwide Landcover

High Precision Vector Maps for All Communities

Building upon the success of our US geocoded building footprints Ecopia is excited to announce the launch of 3D Nationwide Landcover - a high precision vector map product derived from 6" and 12" resolution aerial imagery.

This new product consists of highly accurate vector data extracted over the continental US, and Hawaii, organized into thirteen distinct layers that represent a true geometric footprint of our human-made and natural world. Additionally, all buildings, trees, and bridges will be mapped with unique height attribution to facilitate 3D analytics.

Every sidewalk, tree, driveway, 3D building, and impervious/pervious surface, meticulously mapped across all communities in the country. No longer will it be necessary to manage the time, effort, and output of internal base layer mapping. Instead, off-the-shelf content enables easy access to foundational data when it is needed most. Furthermore, as our imagery partners and customers update their aerial images, Ecopia will maintain the 3D Nationwide Landcover product via clear identification and re-mapping of all changes within your geography.



 Bare Land	 Parking	 Road	 Swimming Pool
 Building	 Pavement	 Sidewalk	 Water
 Forest	 Railway	 Sport Ground	
 Grass	 Driveway		



Initial Imagery



Update Imagery



Change Detection & Re-mapping

How is this Possible?

Ecopia is revolutionizing the way artificial intelligence (AI) is impacting the world of maps and geospatial data. Leveraging our proprietary advanced AI technology, Ecopia mines high-resolution imagery and transforms pixels into geometrically accurate vector maps automatically at country scale. Our feature extraction process captures the 13 land class layers, including heights when applicable, with the precision you expect from a GIS professional, and with automation-level speed, scale and efficiency. This unique mix of accuracy and scale is what enables Ecopia to offer high precision vector maps at significant cost savings in comparison to current workflows, or market options.

Use Cases

Ecopia works with a growing list of US agencies across all levels of government to map nationwide and local communities at a speed, cost, and accuracy never before available. More and more agencies are embracing sustained access to Ecopia's high precision map data in order to establish a clean, rich, and consistently updated geospatial database.

Ecopia's 3D Nationwide Landcover product, coupled with a commitment to keep it freshly maintained, enables agencies of all sizes and geographies to infuse location intelligence creatively into their critical initiatives.



Flood Modelling, Mapping & Risk

Use accurate surface delineation and 3D features to enhance flood modeling and mitigation.



Stormwater Drainage & Property Taxation

Utilize accurate impervious/pervious surfaces to better understand stormwater runoff and calculate a fair fee structure based on per parcel impervious coverage.



Green Infrastructure Planning & Monitoring

Catalyze green infrastructure projects by planning with more accurate as-is site plans, and incentivize citizens to embark on their own projects through rewards for positive per parcel surface change.



GIS Management

Supercharge your GIS database with accurate planimetric layers that can be easily updated with every new image.



Conservation Monitoring & Environmental

Keep tabs on your community's environment through accurate tracking of urban and green space coverage.



Land Use & Urban Sprawl

Stay on top of your constantly growing communities by accurately categorizing every square inch and using change identification to feed your analytics



Emergency Management

Leverage geocoded 3D building footprints and ingress/egress routes in your NextGen 911 infrastructure so that frontline personnel can be accurately dispatched, and navigate with safety and efficiency.



Road & Transportation

Accurately maintain your road, driveway, parking, and sidewalk database to ensure that all citizens have access to safe mobility.

Customized Solutions

We know your community and geography are unique and require custom solutions for your challenges. Often, 13 off-the-shelf land class layers aren't sufficient; perhaps more frequent updates and change identification is necessary. From damaged buildings to decks to any feature discernable in available imagery, Ecopia's next-generation AI can extract the layers your region requires for planning, advanced analysis, revenue generation, citizen benefit, and more.

It is time to move beyond spending the time and effort of manual digitization and instead repurpose that time into geospatial analytics that actually makes a material difference to your organization's bottom line.

Please contact us to discuss your unique needs and how we may help you and your organization with this game-changing geospatial information.

3D Buildings, Bridges & Trees



(519) 342-0193



sales@ecopiatech.com



www.ecopia.ai