

Monitoring Growth and Infrastructure Development

OneAtlas Case Study | Living Library

Challenge

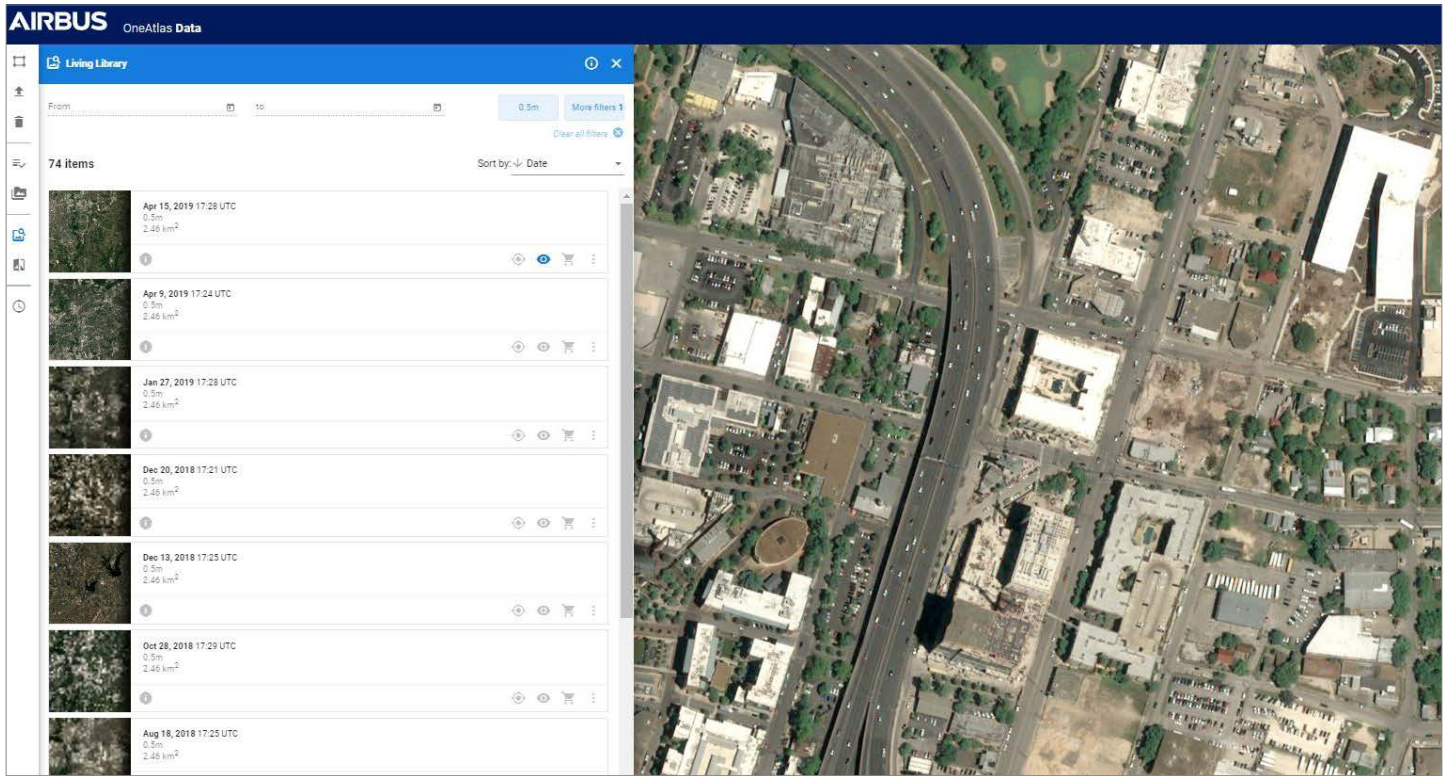
Engineering firms and government agencies need up-to-date information on the exact status of infrastructure development in urban areas to plan and monitor projects as they relate to new neighborhoods, roads, and parks.

Solution and Results

Living Library gives engineering firms instant and affordable access to recently acquired high-resolution imagery which provides an accurate snapshot of new infrastructure development over a specific date. Living Library also provides critical archive imagery to determine past land use and infrastructure locations.

Benefits

Access to Living Library imagery online is fast, easy and affordable with selected data streamed or downloaded into most GIS/digital mapping environments. The data provides the positional accuracy required for engineering planning.



The OneAtlas data interface shows imagery available over your area of interest.

Challenge

Some infrastructure construction is progressing so quickly that official maps don't accurately portray the situation on the ground. A high-level overview of urban development is needed.

Engineering firms are often contracted to produce this planning information for the public and elected officials before, during and after a major construction project.

These firms need an accurate and reliable means of creating an up-to-date planning basemap that includes building footprints, transportation features, utilities, recreation facilities, and neighbourhoods. Even structures not officially permitted by the local government, such as home additions, must be included.

Drones and aircraft can't provide this information efficiently, comprehensively or cost effectively.

Solution and Results

Through OneAtlas, engineering firms now have instant access to recently acquired very high-resolution imagery that can be obtained immediately with flexible purchasing options.

Living Library is a cloud-based Earth observation satellite data service comprised of global data layers and fresh acquisitions of 50cm-resolution Pléiades and 1.5m SPOT imagery filtered for quality. Pléiades data has a maximum cloud cover of 15% with an incidence angle not exceeding 30 degrees. For SPOT, the parameters are 5% and 20 degrees.

New data is added daily, and subscribers will soon be able to request alerts when their area of interest (AOI) is covered with a new acquisition.

Living Library imagery offers the ideal combination of spatial resolution and positional accuracy for use in infrastructure planning projects.

Solution Description

Engineering firms, as well as governmental agencies, involved in all phases of planning new urban development projects can benefit from subscriptions to the Living Library.

Benefits

- A rapid cost-effective solution, Living Library provides date-stamped snapshots of infrastructure development progress – even in dense urban areas – ready for instant streaming or download into a planning GIS with no minimum area requirement.
- Satellite imagery provides monitoring of any unforeseen impacts surrounding any development or construction programme.

“Having pre-construction, periodic image updates, and post construction imagery provides a clear ‘storyline’ that documents change.”