Vianova Intelligence Platform
Technical Capabilities Overview

DATA INTEGRATION & MANAGEMENT

Custom Data Upload
→ Seamless integration of CSV and GeoJSON files → Support for proprietary data formats and real-time data streams → Ideal for organizations with existing datasets or unique data requirements
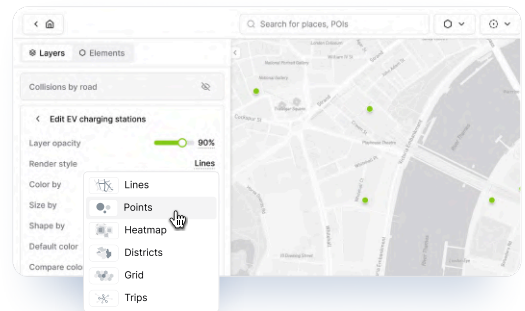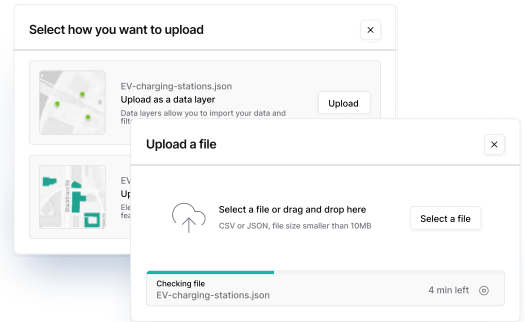
Flexible Data Layering
→ Multiple visualization options: points, heatmaps, cluster-buckets → Layer opacity and style controls for optimal data representation → Perfect for analyzing complex, multi-dimensional spatial data

Data Integration Features
→ Seamless CSV/Geojson integration or through custom API integrations → Real-time streaming capabilities for live data processing → Comprehensive alerting system for data anomalies and thresholds → Support for H3, road-based, and custom-shape aggregations

Geographic Management
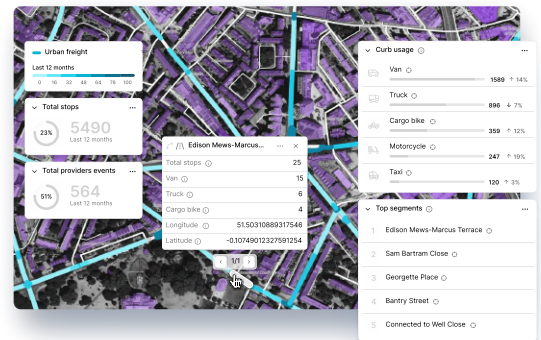→ Advanced map element controls for multiple geographies → Flexible boundary and area management

DYNAMIC VISUALIZATION

Adaptive Rendering Engines
→ Real-time switching between visualization types (dots/heatmaps/clusters) → Performance-optimized rendering for large datasets → Essential for users working with high-volume spatial data

Interactive Widgets
→ Auto-generating data insights based on selected filters → Real-time updates reflecting current map view and selections → Valuable for analysts requiring immediate data feedback

ANALYSIS TOOLS

Temporal Analysis
→ Before/after comparisons across any date range → Historical trend analysis capabilities → Critical for measuring impact and tracking changes over time
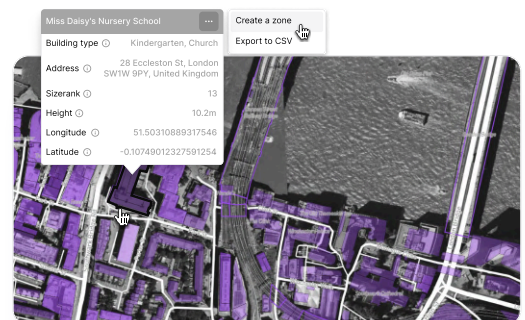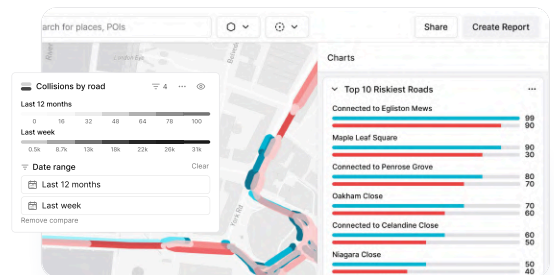
Geographic Filtering
→ Custom element upload for geographic boundary definition → Conversion of elements into interactive spatial filters → Enables complex spatial queries and proximity analysis

Automated Insights
→ Top 10 rankings by various metrics → Auto-generated statistics for selected areas → Valuable for quick decision-making and reporting

Advanced Analytics
→ Road snapping functionality for precise route analysis → Origin/Destination (O/D) analytics for movement patterns → Custom report generation with PDF export capabilities

REPORTING & COLLABORATION

➔ Selective data masking for focused analysis ➔ Points of interest highlighting ➔ Ideal for stakeholder communication and decision-making
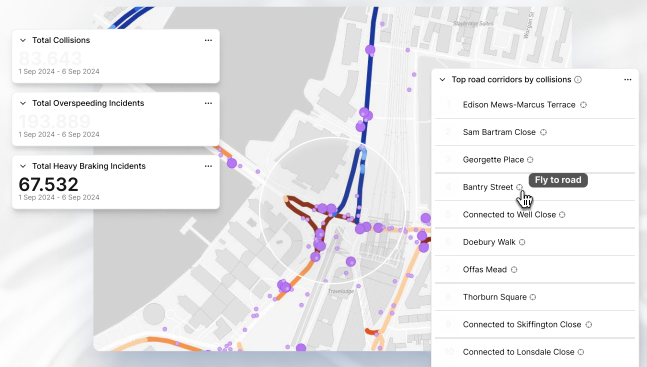
➔ Proximity-based infrastructure assessment ➔ Custom criteria evaluation (e.g., speed near schools) ➔ Essential for urban planners and infrastructure managers

INTERACTIVE MAP FEATURES

➔ Widget-triggered map focusing and zooming ➔ Instant geographic context for data insights ➔ Optimizes workflow for rapid spatial analysis

➔ User-defined polygonal zones with adjustable buffers ➔ Precise area definition for targeted analysis ➔ Essential for impact assessment and planning
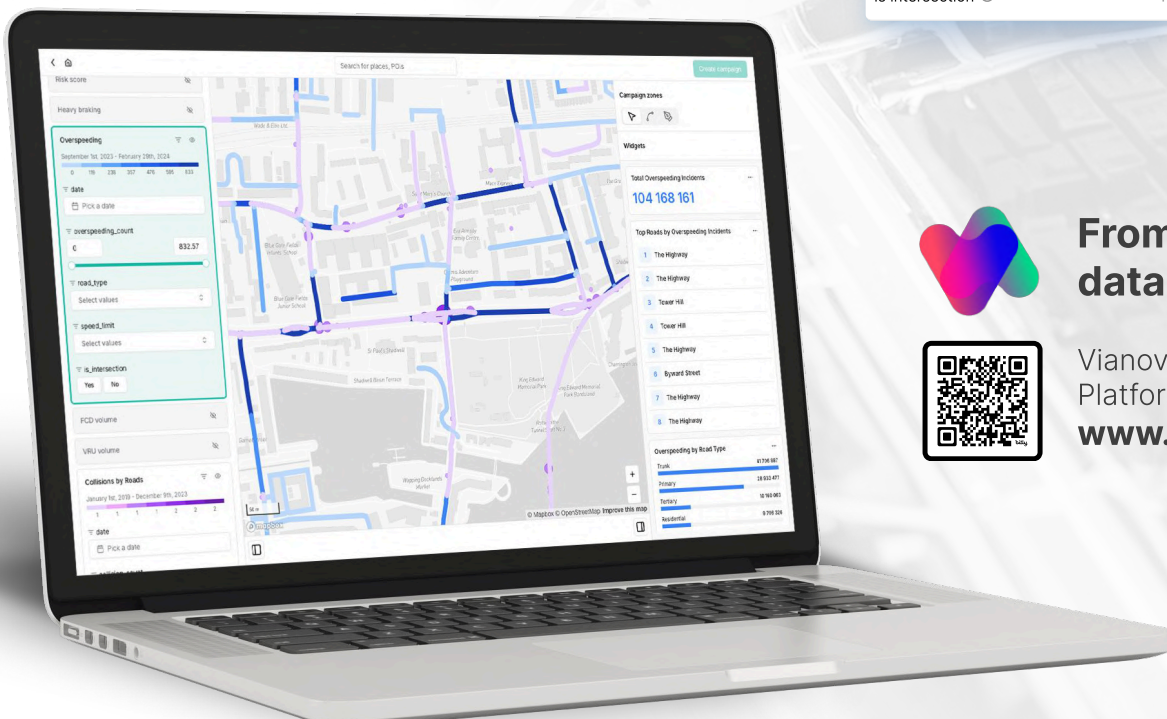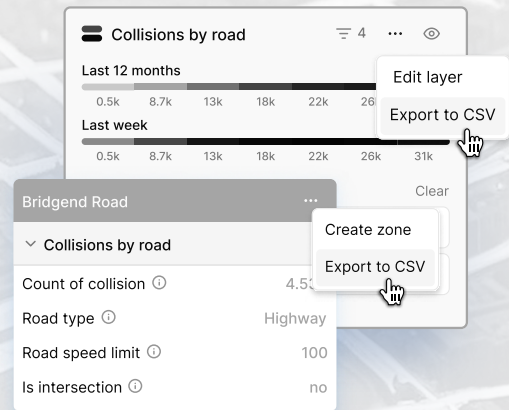
DATA EXPORT & INTEGRATION

➔ One-click export of filtered datasets ➔ Compatible with external analysis tools ➔ Enables seamless workflow integration

INFRASTRUCTURE, SECURITY & ACCESS

➔ AWS hosting options: ➔ Multi-regional configuration ➔ Segregated infrastructure options ➔ Multi-cloud compatibility

➔ Industry-standard security certifications and compliance, including SOC-2 ➔ Role-Based Access Control (RBAC) implementation

From mobility data to action

Vianova Intelligence Platform
www.vianova.io