

Interactive Map Features

When you login to PredPol, you are presented with PredPol's Interactive Map. On the left, you can select a Patrol Area and cycle through today's shifts. On the right, you have Dosage, Layers, Car Finder and Crime Types Funnel.

Notes:

Missions for today's shifts are predefined by your site's administrator.

Dosage & Car Finder are only available if your department has purchased & implemented the PredPol GPS module which utilizes Automatic Vehicle Location data supplied by your department.

Patrol Areas

Every Site has a Patrol Area for the city or county. If you provide additional maps for segments of the city, these maps are added as lower level patrol areas. The left-most control allows you to select a different patrol areas. After you have selected a new patrol area, you may collapse the list by click on the patrol area as indicated by the arrow.

Notes:

Patrol Areas are nested and may contain up to 4 levels.

This example shows 2 levels, overview groups and patrol areas. Overview group are Grey and aggregate the patrol areas. An overview group view is seen below.

An Officer may be limited to a single patrol area by the site administrator.

Shifts

PredPol's Shifts are pre-defined by your site administrator. On the interactive map, you limited to cycling through today's shifts. As you change shifts, the predictions for each shift are displayed.

Dosage

PredPol's Patrol Dosage is the patrol time spent in predicted locations over a shift. The Patrol Dosage goal is derived from the number of prediction boxes for your Patrol Area for each shift. Dosage is provided in summary and detail for selected Date Range, District, Shift & Mission.

Officers see the prediction boxes for the scheduled Mission on the Interactive Map or via emailed Daily Patrols reports. Officers visit the predicted locations to create dosage. Command Staff reviews progress on the Patrol Dosage Meter.

In Example A above, Watch2 has not achieved the target patrol dosage. This shift ends at 18:00. Officer's have a few hours to visit the prediction boxes & move the patrol dosage meter into the green range. If the patrol dosage meter does not reach the green range, the Patrol Area may have too many prediction boxes for the shift.

In Example A, the Patrol Area has 20 prediction boxes spread over a very large geographic area. The Department requested the number of prediction boxes be reduced to focus the patrol. The target with 20 boxes was 720+ minutes. In Example B, the Patrol Area has 10 prediction boxes per shift. The new patrol dosage goal is 360+ minutes, to reach the green range.

In Example C, the Patrol Dosage Detail shows a bar chart of descending dosage by officer for a today, a week, last month, year-to-date or a custom range of dates.

Example C

Example D shows all dosage events for the selected shift at a glance.

Example D

Example E is the Dosage List. The list contains the row detail for the charts.

Example E

Notes:

PredPol Patrol Operations requires Automatic Vehicle Location data from your RMS.

Patrol Dosage is only up-to-date if your Department sends a constant AVL feed to PredPol. Some Departments only send data once per day. Departments that send once per day will be updated within 2 hours of receipt of new data.

PredPol Patrol Operations is an add-on to PredPol's Predictive Application.

PredPol Patrol Operations adds Patrol Dosage, recent Patrol Vehicle Locations, Patrol Vehicle Path playback and a Patrol Heat Map.

Agencies choose a predictive Patrol Mission. A Patrol Mission can be a single or aggregation of crimes types. Different Patrol Missions may be scheduled from shift to shift or district to district. PredPol generates Patrol Dosage only for the scheduled Patrol Mission.

Layers

Clicking on opens Layers. With Layers, you overlay information on the Interactive map. Multiple layers can be added to the Interactive Map. Layer are available for Previous Prediction Boxes, Historical Events, a Vehicle Path over a shift and a Patrol Heat Map. Layer controls:

Click the arrow to collapse or expand the layer details

Click the eye to hide or show the layer graphics on the map

Click the X to delete the layer from the map

Layers > Previous Prediction Boxes

Select a Date, Patrol Area, Shift, Patrol Mission and Color for the previous prediction boxes.

Layers > Crime History

Select a date, crime type patrol area, and show/hide excluded crimes. Colors match crime types.

Layers > Vehicle Path

Select a day, patrol area, shift, device_id and color. The vehicle's patrol path will be drawn on the Interactive Map. Press play to automate the vehicle along the patrol path. Visits to Prediction Boxes show visit durations.

Note: Patrol Vehicle Path requires PredPol Patrol Operations. PredPol Patrol Operations requires Automatic Vehicle Location data from your RMS.

Layers > Patrol Heat Map

Select a date range and a patrol area. Patrol duration is mapped using shades of purple. Darker shades reflect more patrol time. Hover over a box to see the time for the 500' x 500' area.

Note: Patrol Heatmap requires PredPol Patrol Operations. PredPol Patrol Operations requires Automatic Vehicle Location data from your RMS.

Recent Vehicle Locations

Clicking on the Badge Icon opens Recent Vehicle Locations. Click on any vehicle in the list and the map will snap to the last reported position of the vehicle. The list has 4 sort options, newest/oldest timestamp or ascending/descending device_id.

Note:

Patrol Vehicle Locations requires PredPol Patrol Operations. PredPol Patrol Operations requires Automatic Vehicle Location data from your RMS.

This feature is not intended to and does not provide current vehicle locations.

Only Command Staff and Administrators have access to recent vehicle locations.

PredPol processes incoming location records every 10 minutes.

When a vehicle is STATIONARY for longer than the processing lag, ACTUAL VEHICLE LOCATIONS WILL BE DISPLAYED. ex: Vehicles parked outside or at a crime scene.

Vehicles failing to report in the last 48 hours are trimmed from the list.

Crime Types Filter

Clicking on opens the Crime Type Filter and Crime History. Crime Types Filter opens populated with crime types for the scheduled Mission for the current shift. You may change the selections and reveal alternate predictions.

PredPol calculates predictions for every Crime Type. Predictions for Crime Types not in the Scheduled Patrol Mission are only available in the Crime Types filter.

In this example, the scheduled Mission is for Crime Types: Vehicle Burglary, Auto Theft and Burglary. If you change the selected Crime Types, the predictions shown are different.

Patrol Areas control the number of prediction boxes shown.

Crime History may be mapped by using the lower set of controls. Crime History offers preset buttons for 3, 7, 14, 28 days or you can select a custom date range.

How Do I Get Reports on the Predictions?

Prediction Reports are available as an email or using Predictions > Daily Patrols to print while logged in to your site. To sign up for emailed Daily Patrols, visit your Profile page.

Click on Predictions > Daily Patrols

Daily Patrols will open in a new tab with the current shift selected.

You can also reprint previous Daily Patrols using the district, shift, and crime controls. Simply click the date drop-down list at the top right of the Daily Patrol page.

To change Patrol Area, click the district name drop-down list and choose the district you wish to view. NOTE: the crime types will revert to the Mission or default crime types for the selected district.

If you scroll to the bottom of the page, you can add a page to the Daily Patrol, detailing crime history using the same criteria. You can also double click on any prediction box to view that prediction on a full page map. Or you can click on this blue bar to show all predictions in more detail.

Once you are done with the Daily Patrol, close this window to return to the Interactive Map.

Note:

Predicted locations on the Daily Patrol are not ranked.

Labels are assigned randomly to the predicted locations.

What is the Funnel?

Each night, PredPol calculates prediction boxes for every Crime Type. The Daily Patrol and Interactive Map show prediction boxes for the scheduled Mission. Prediction boxes for the crime types not included the scheduled Mission are suppressed.

The Funnel allows you to model alternate Missions by selecting a different mix of crime types. When you login, you are presented the Interactive Map. The Mission is preselected on the Interactive Map for each shift by your site admins.

In the example below, the side panel defaults to the scheduled mission. As you alter the selections you are creating an alternate Mission Plan. You can see the prediction boxes change on the map as you vary the crime types.

You can add crime history using presets of 3, 7, 14, 28 days or a custom date range. To select a custom date range, Click on the begin date of your desired range. Navigate to the end date and click the end date. All days included within the range will be highlighted in dark blue. Click on the calendar again to deselect the current date selection and select a different date range.

The crime history appears on the map as color-coded dots. The colors match the Crime Types. History dots are clickable. Click on a dot to view the detail of the individual event, as seen below.

Analytics > Overview

Overview contrasts current period events (in blue) with last year's events for the same time period. You can vary the date range, patrol area, shift and patrol mission to drill down into your reported events.

Info boxes highlight the Crime Type with highest percentage increase, total crimes for the date range, the day of the week with the most events, the time of day with most events.

Bar chart shows this year's events next to last year's events for the same date range. The table shows Last Week, Last Month and Year to Date events. Overview is available as a PDF or CSV download. A bar chart shows crimes sent vs used for predictions. A Heatmap plots crimes by day of the week and hour with a gradient color. A spiderweb shows crime volume by day of the week.

Analytics > Audit Crimes

Audit Crimes is a data quality tool. If an excluded crime can be updated in your RMS, the crime will be updated in PredPol.

Audit report opens with YTD selected. A bar chart of crimes sent vs crimes used for Predictions is displayed on the left.

The same information is presented in a numerical chart on the right.

At the bottom are exceptions, categorized by the reason excluded. Open a category by clicking the section.

Excluded crimes may be downloaded in CSV format. Click the button to download the CSV.

Analytics > Search Crimes

Crimes Search is a data analysis tool. Using Crime Search, you can search crime types, districts, violation codes, event descriptions, dates, address, or incident number for a date range. Navigate to Analytics > Search Crimes. Crime Search verifies crimes in PredPol. If you need to make changes, simply update the record in your RMS system and the change will propagate to PredPol within a day or so, depending on the data relay schedule for your site. Click on one or more fields and enter the search term(s).

Select from the drop down menus for Crime Types, Districts and Shifts.

When your selections are complete, click on submit.

Classified events match a Crime Type and are included in predictions.

Unclassified events do not match a Crime Type and are excluded from predictions.

Download your results as a comma separated value file (spreadsheet) or Portable Document Format by clicking on the CSV or PDF button.

Search results are limited to 5,000 rows.

Manage > Patrol Area

Patrol Areas define a jurisdiction and are added during site setup. The edges of a Patrol Area are defined by a Keyhole Markup Language file provided by your department. Patrol Areas can be nested when large Patrol Areas are split into smaller Patrol Areas. Active Shifts and quantity of prediction boxes for each shift are stored in the Patrol Area.

Site Administrators or PredPol Support can Edit, Remove or Reset a Patrol Area.

Manage > Mission

Mission Configuration is a feature that allows for you to control which boxes patrol officers will see for any shift for any day of the week. Mission Control allows you to set different patrol priorities based on the problems that particularly occur during that time of day or day of the week.

For example, let's say most of your Residential Burglaries happen Monday - Friday during the day shift. Conversely, most Commercial Burglaries happen during the night shift on the weekend. You can set those priorities within the application so officers who log on will see those particular crime types selected by default. This way, you can be sure that officers are allocated with maximum efficiency.

To configure missions navigate to Manage > Missions.

Under Manage > Missions: You create a mission by clicking the CREATE button in the grey box labeled "Create a new mission".

The Mission should be comprised one or more of crime types, with similar environmental and criminal behavior patterns, that you would like patrol focused on for any given mission. Give the mission a name and hit "save changes". We have attached a screenshot of the Mission Configuration page.

Once the mission is created, you can begin assigning these missions to individual shifts, for each day of the week, within each specific district/beat/zone in the Mission Schedule area.

Note that once scheduled, new Missions take effect the next time this shift occurs if it is the current shift. This is to prevent users from having boxes change on them in the middle of the shift.

Once your missions are set, we recommend trying any given mission for at least 3 months consecutively to ensure you have significant results in crime reductions.

Manage > Shifts

Shifts are added during site setup. Admins can add, edit or remove shifts.

Manage > Crime Types

Crime Types are used to bucket violations using matching rules. If a reported event contains multiple violation codes, the violation codes will be checked against matching rules for every Crime Type. Any violation code does not match any rule, the event is unclassified. Review Unclassified items using the audit report. If you are an Admin and do not see this page, email.

Manage > General

General supports the coordinate and address exclusions. Coordinate exclusions are used to prevent prediction boxes at a point on the map. Address exclusions are used for locations with reported events and the events should be excluded from predictions.

If you would like to exclude location, address or prediction box, please email.

Manage > Users

Department administrators can add users by clicking Manage > Users.

When adding a user, you have the ability to select a role which defines their permissions to the system.

PredPol Roles are:

Department Admin - able to see predictions, crime history, reports, Crime Search, Audit Report; includes the ability to add or delete users, and configure Missions.

Command Staff - able to see predictions, crime history, reports, Crime Search, and Audit Report.

Analyst - same as Officer. Use this role to differentiate between officers and analysts.

Officer - able to see predictions, crime history, reports, and Crime Search.

To add a user to PredPol, you will need user's name, email address, and role.

Access to the following features can be enabled or restricted by role:

Dosage

Map Layers

Crime Types Funnel

Overview

Mission Scheduling & Configuration

Shifts Management

Patrol Area Management

User Management

Crime Types Management

Excluded Locations - Please email NEW exclusion locations to

Please Note: Any Change requires written approval from Your Site's PredPol Technical Contact or PredPol Administrator.

How Do I Administrate Users?

Registered users with "admin" privileges have the ability to manage users on their PredPol site.