

PETRAPro



Street	From North	From South	From East	From West	From All	From None	From Other	From Unknown	From Total
06:00:00	1	0	2	2	22	0	1	2	30
06:15:00	0	0	1	1	26	0	2	0	29
06:30:00	4	0	4	0	20	0	0	0	28
06:45:00	4	0	2	0	25	0	0	0	29
07:00:00	2	0	0	0	12	0	0	0	14
07:15:00	1	0	0	0	11	0	0	0	12
07:30:00	4	0	0	0	15	0	0	0	19
07:45:00	4	0	0	0	16	0	0	0	20
08:00:00	4	0	0	0	17	0	0	0	21
08:15:00	6	0	0	0	13	0	0	0	19
08:30:00	2	0	0	0	11	0	0	0	13
08:45:00	2	0	0	0	11	0	0	0	13
09:00:00	2	0	0	0	11	0	0	0	13
09:15:00	2	0	0	0	11	0	0	0	13
09:30:00	2	0	0	0	11	0	0	0	13
09:45:00	2	0	0	0	11	0	0	0	13
10:00:00	2	0	0	0	11	0	0	0	13
10:15:00	2	0	0	0	11	0	0	0	13
10:30:00	1	0	0	0	10	0	0	0	11

Traffic Data Analysis Software

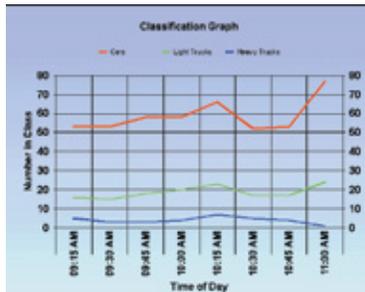
- Downloads Data from the TDC Ultra
- Produces Comprehensive Reports
- Data Analysis for:
 - Turning Movements
 - Roundabout Movements
 - Saturation Flow Rate
 - Stop Sign Delays
 - Vehicle Classifications
 - Multi-direction Gap
 - Speeds with Class
 - Signalized Delays

Additional Traffic Data Analysis

In addition to Turning Movement studies, PETRAPro allows you to process and analyze a number of other types of traffic data that can be collected with the TDC Ultra. With all of these studies, the program's user-friendliness and powerful capabilities makes downloading and reporting an easy task.

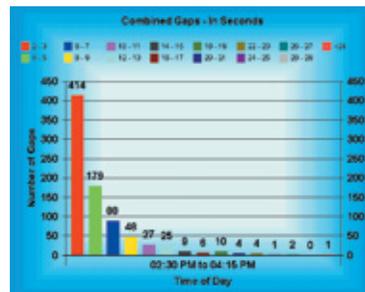
• Vehicle Classification

Classification reports, which determine the types of vehicles using a road, can be generated using either the FHWA scheme F or with a classification scheme created by the user. Multiple sets of schemes can be saved in the program for quick access.



• Multi-Direction Gap

Gap studies are used to determine the amount of breaks in traffic on a particular road. Study can be recorded for multiple lanes and can also include combined gap information for times when there were gaps in both lanes of traffic simultaneously.



• Signalized Intersection Delay

End Time	Stopped at End of Stoppage	Stopped	Through	Total Volume
03:00:00 PM	0	0	0	0
03:01:00 PM	0	0	0	0
03:02:00 PM	0	0	0	0
03:03:00 PM	0	0	0	0
03:04:00 PM	0	0	0	0
03:05:00 PM	0	0	0	0
03:06:00 PM	0	0	0	0
03:07:00 PM	0	0	0	0
03:08:00 PM	0	0	0	0
03:09:00 PM	0	0	0	0
03:10:00 PM	0	0	0	0
03:11:00 PM	0	0	0	0
03:12:00 PM	0	0	0	0
03:13:00 PM	0	0	0	0
03:14:00 PM	0	0	0	0
03:15:00 PM	0	0	0	0
03:16:00 PM	0	0	0	0
03:17:00 PM	0	0	0	0
03:18:00 PM	0	0	0	0
03:19:00 PM	0	0	0	0
03:20:00 PM	0	0	0	0
03:21:00 PM	0	0	0	0
03:22:00 PM	0	0	0	0
03:23:00 PM	0	0	0	0
03:24:00 PM	0	0	0	0
03:25:00 PM	0	0	0	0
03:26:00 PM	0	0	0	0
03:27:00 PM	0	0	0	0
03:28:00 PM	0	0	0	0
03:29:00 PM	0	0	0	0
03:30:00 PM	0	0	0	0
03:31:00 PM	0	0	0	0
03:32:00 PM	0	0	0	0
03:33:00 PM	0	0	0	0
03:34:00 PM	0	0	0	0
03:35:00 PM	0	0	0	0
03:36:00 PM	0	0	0	0
03:37:00 PM	0	0	0	0
03:38:00 PM	0	0	0	0
03:39:00 PM	0	0	0	0
03:40:00 PM	0	0	0	0
03:41:00 PM	0	0	0	0
03:42:00 PM	0	0	0	0
03:43:00 PM	0	0	0	0
03:44:00 PM	0	0	0	0
03:45:00 PM	0	0	0	0
03:46:00 PM	0	0	0	0
03:47:00 PM	0	0	0	0
03:48:00 PM	0	0	0	0
03:49:00 PM	0	0	0	0
03:50:00 PM	0	0	0	0
03:51:00 PM	0	0	0	0
03:52:00 PM	0	0	0	0
03:53:00 PM	0	0	0	0
03:54:00 PM	0	0	0	0
03:55:00 PM	0	0	0	0
03:56:00 PM	0	0	0	0
03:57:00 PM	0	0	0	0
03:58:00 PM	0	0	0	0
03:59:00 PM	0	0	0	0
04:00:00 PM	0	0	0	0

Intersection Stop Delay - Quick Analysis
 Elapsed Time: 0 Hours, 7 Minutes, 30 Seconds
 Number Stopped: 31
 Approach Volume - Stopped: 29
 -Through: 22
 Approach Total: 51
 Total Delay: 455 Seconds
 Avg. Delay per Stopped vehicle: 15.0 Seconds
 Avg. Delay per Approach vehicle: 3.1 Seconds
 Percent of Vehicles Stopped: 55.3%

Signalized Intersection Delay studies are based on standard methods used by traffic engineers and provide a statistical method for measuring delays. Reports provide total volume recorded during the study, broken down into vehicles that were delayed at the signal, and those that went through without delay.

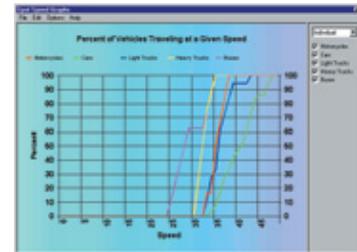
• Time-Stamp Data

Create your own traffic data study using the time-stamp download of PETRAPro. Using a TDC Ultra, you can record the time-stamp of every button you push. This data can then be downloaded into PETRAPro and exported into other applications, like Excel, to allow you to create your own data analysis.

Event Name	Time	Value
1	03:00:00	0.000
2	03:01:00	0.000
3	03:02:00	0.000
4	03:03:00	0.000
5	03:04:00	0.000
6	03:05:00	0.000
7	03:06:00	0.000
8	03:07:00	0.000
9	03:08:00	0.000
10	03:09:00	0.000
11	03:10:00	0.000
12	03:11:00	0.000
13	03:12:00	0.000
14	03:13:00	0.000
15	03:14:00	0.000
16	03:15:00	0.000
17	03:16:00	0.000
18	03:17:00	0.000
19	03:18:00	0.000
20	03:19:00	0.000
21	03:20:00	0.000
22	03:21:00	0.000
23	03:22:00	0.000
24	03:23:00	0.000
25	03:24:00	0.000
26	03:25:00	0.000
27	03:26:00	0.000
28	03:27:00	0.000
29	03:28:00	0.000
30	03:29:00	0.000
31	03:30:00	0.000

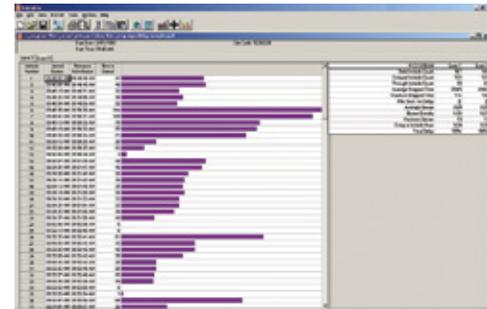
• Spot Speed with Classification

Spot Speed studies allow you to measure speeds at a specific location, often times at locations in which the use of an automatic traffic recorder (ATR) would not be possible. They can also be done for short term studies where the time to set up an ATR would not be justified. The speed data can be recorded in one group or broken down into various vehicle classifications.



• Stop Sign Delay

Stop Sign Delay studies are used to determine the length of delays occurring at a specific approach to a stop sign. The data can be collected and reported for multiple lanes and is shown for each individual vehicle with a graphical representation of the delay.



The overall data is analyzed for Average Stopped Time, Maximum Stopped Time, Average Queue, and Queue Density, among other statistics. This type of study can also be done for an approach to a signalized intersection.

• Saturation Flow Rate



PETRAPro allows you to quickly and easily produce reports for saturation flow rates at intersections. These rates are based on actual real-time data, and not on predefined values that may or may not be accurate. Depending on how the data has been collected in the field, PETRAPro can process and analyze the data for not only Saturation Flow rate, but also vehicle headways, lost times, arrival types, signal timings & approach volumes.

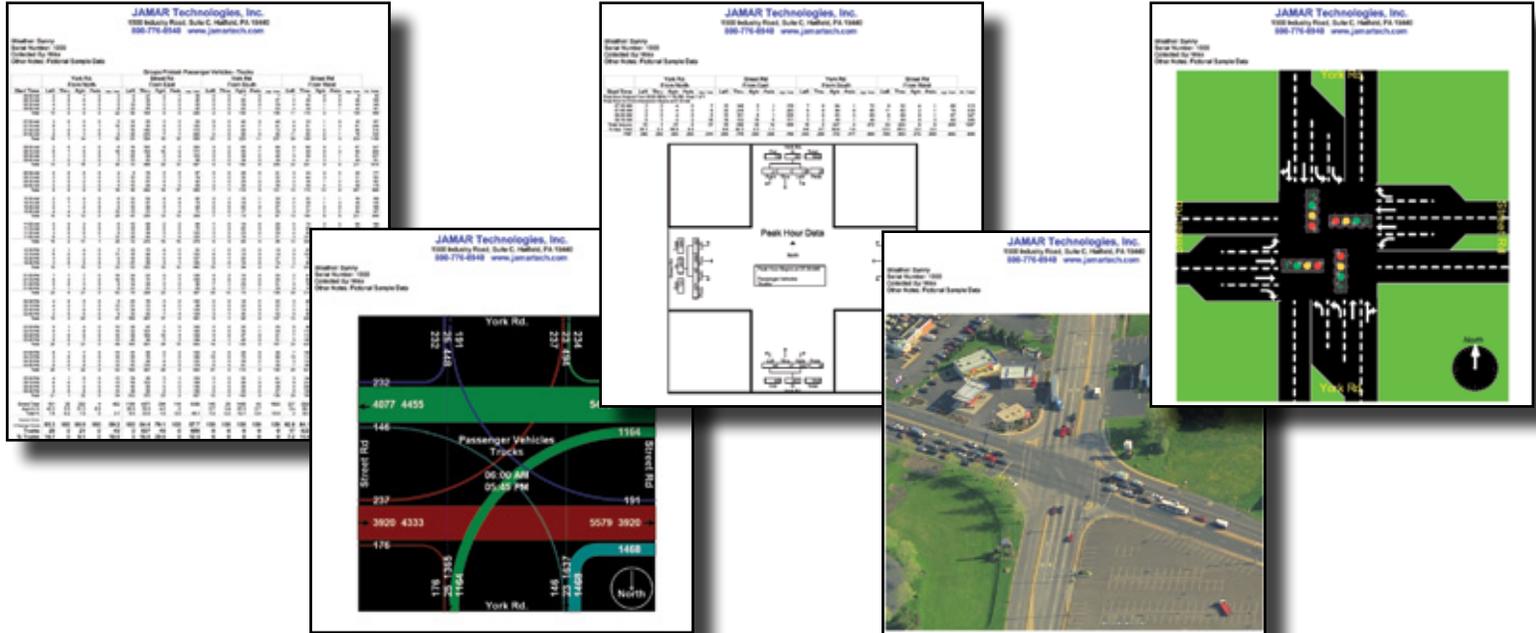
Specifications

- Downloads data from: TDC Ultra, TDC-12, TDC-8, DB-400, DB-100
- Windows XP, Vista or 7 Operating System
- USB Port for Download
- Data Analysis for: Turning Movements, Roundabout Movements, Vehicle Classification, Multi-direction Gap, Stop Sign Delay, Signalized Intersection Delay, Spot Speed, Saturation Flow Rate

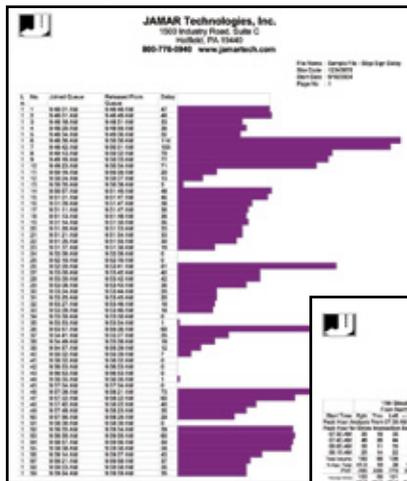
Extensive Report Options

PETRAPro provides you with a variety of ways to report your data in a professional and concise manner. Reports can be produced in color and sent directly to a printer, or saved in an electronic format (PDF or Rich Text) for e-mailing or posting on the Internet.

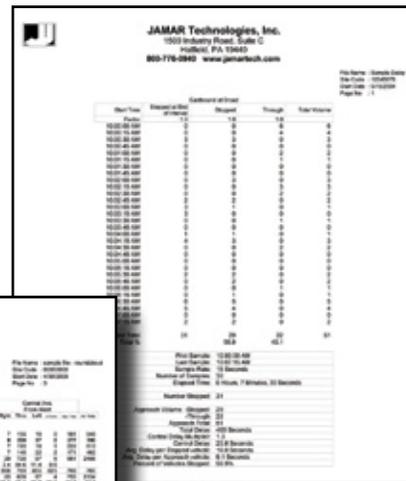
Turning Movements



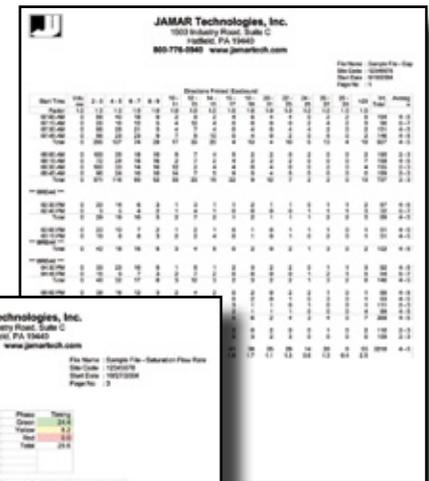
Stop Sign Delay



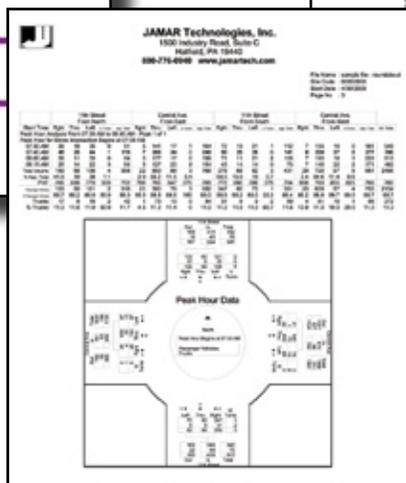
Signalized Intersection Delay



Multi-direction Gap



Roundabout Movements



Saturation Flow Rate

