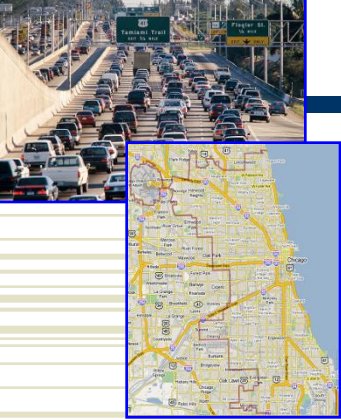


# Chicago Traffic Information Website

Abraham Emmanuel

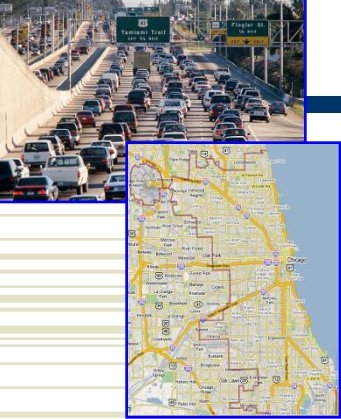
City of Chicago

Office of Emergency Management & Communication / Traffic  
Management Authority



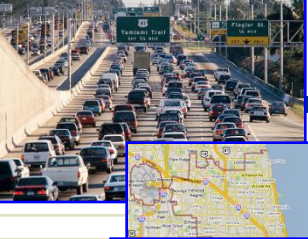
# Background

- ◆ No comprehensive source for Chicago traffic data.
  - *Most available data is from disparate sources.*
- ◆ OEMC receives hundreds of FOIA (Freedom of Information Act) requests each year for traffic data.
- ◆ Many states and local governments provide a web based traffic information map.
  - <http://www.i-move.ca/Motorists> (Vancouver)
  - <http://www.leedstravel.info/cdmf-webserver/jsp/leeds.jsp> (Leeds, UK)



# Interactive Map

- ◆ <http://webapps.cityofchicago.org/traffic/>
  - Average Daily Traffic (ADT)
  - Traffic Signal Locations
  - Red-Light Running Camera Intersections



# Map Features

**City of Chicago Traffic Information**  
 Provided by OEMC Traffic Management Authority

OEMC TRAFFIC MANAGEMENT AUTHORITY

Jun 10, 2009 10:23 AM

Go to an Intersection: Street Name... At Intersection with... Go

OR

Select a Landmark: Landmarks... Go

Home Map Options Reports

Map Satellite Hybrid

Can zoom into any one of the 26,000 intersections or to a landmark.

Sequential listing of the data available.

Turn on or off available data layers

More data displayed as zoom level increases.

Current Zoom Level: 11

Click on the icons on the map to view details.

Turn on/off data layers by selecting the check box(es) below.


<input type="checkbox"/>	Traffic Count(ADT)
<input type="checkbox"/>	Signals
<input type="checkbox"/>	Redlight Cameras
<input checked="" type="checkbox"/>	City Boundary

About this Site  
 Website Help  
 Disclaimer



Powered by Google

map data ©2009 Tele Atlas

# Additional Information on each Marker



**City of Chicago Traffic Information**  
Provided by OEMC Traffic Management Authority

Jun 10, 2009 3:06 PM

Go to an Intersection   OR Select a Landmark

Traffic Count Locations and Volume added..

More data displayed as zoom level increases.

Current Zoom Level: 16

Click on the icons on the map to view details.

Turn on/off data layers by selecting the check box(es) below.

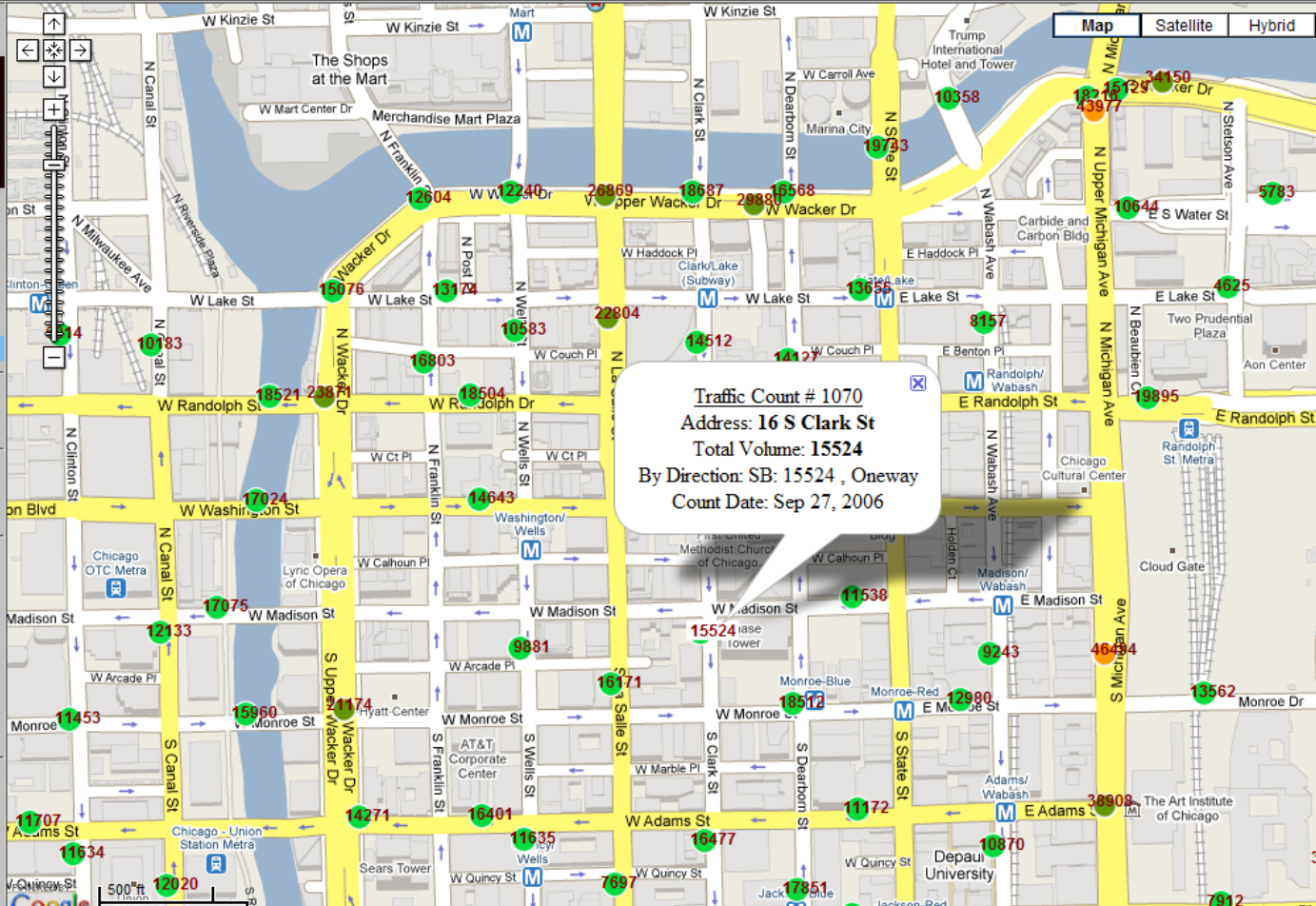
Traffic Count(ADT) 2345  
● > 40,000  
● 20,000 - 40,000  
● < 20,000

Signals  
 Redlight Cameras  
 City Boundary

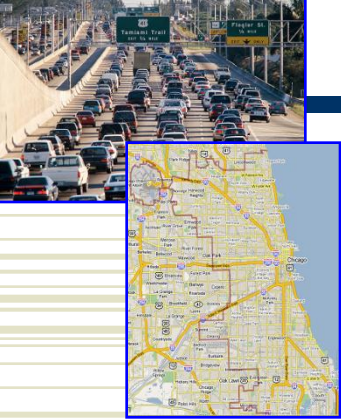
[About this Site](#)

[Website Help](#)

[Disclaimer](#)



Traffic Count # 1070  
Address: 16 S Clark St  
Total Volume: 15524  
By Direction: SB: 15524 , Oneway  
Count Date: Sep 27, 2006



# More Data Layers Planned

- ◆ Real-time arterial traffic congestion.
- ◆ Downtown Pedestrian Counts.
- ◆ Bike Routes
- ◆ Airport Advisory
- ◆ Traffic Crash Stats?
- ◆ Construction
- ◆ Traffic Incidents
- ◆ and more.....



# Crash Statistics?



City of Chicago Traffic and Traveller Information  
Provided by OEMC Traffic Management Authority



Jun 10, 2009 2:42 PM

Select an Intersection   OR Select a Landmark   OR Scroll the map using mouse or zoom control on top left corner of the map.

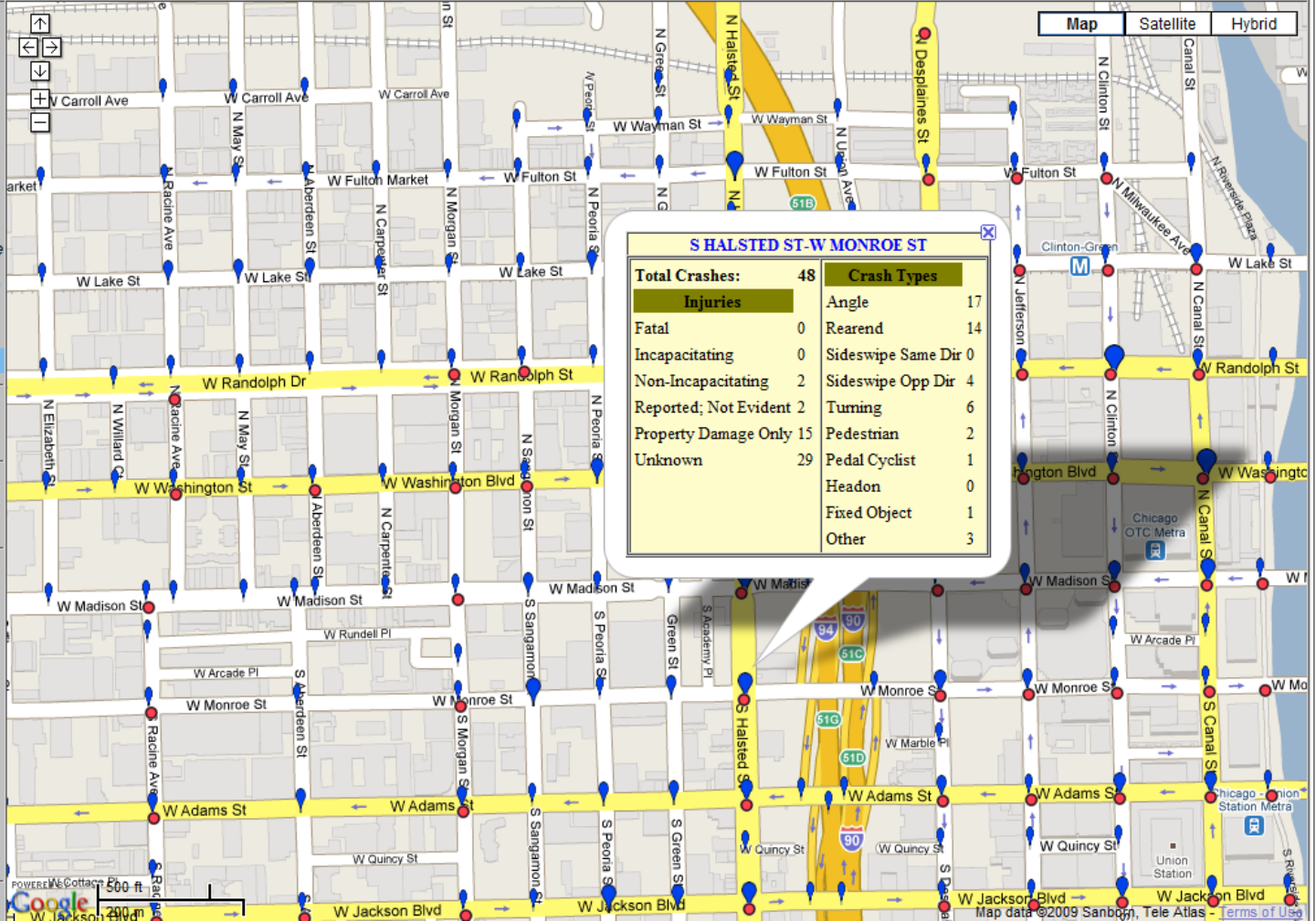
Only random markers visible at lower zoom levels. All markers are visible at zoom level 16 or above. Use mouse wheel or zoom control on map to zoom in/out.

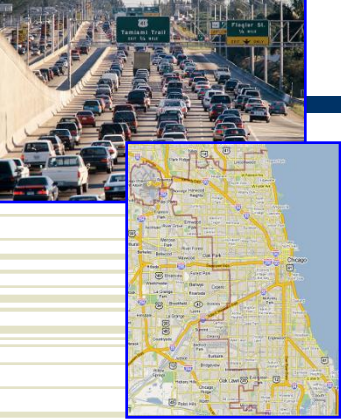
Current zoom level: 16

Click on the markers on the map for details.

Turn on/off any of the available layers by selecting the check box(s) below.

- Traffic Count(ADT)
- Intersection Crashes
  - 2004
  - 2005
  - 2006
  - 2007
  - 2004-07
- Signals
- Real-time Traffic
- Redlight Cameras
- City Boundary





# Real-time Arterial Traffic Congestion

- ◆ Estimate traffic conditions in real-time on 300 miles of strategic routes on City of Chicago.
  - Probes Vehicles / CTA Buses ← (*current focus*)
  - Embedded sensors
  - Cell probes
  - Toll Tag Readers, Traffic Detection Cameras etc.





# Traffic Congestion Map



City of Chicago Traffic and Traveller Information  
Provided by OEMC Traffic Management Authority



May 19, 2009 11:34 AM

Select an Intersection   OR Select a Landmark   OR Scroll the map using mouse or zoom control on top left corner of the map.

Map Satellite Hybrid

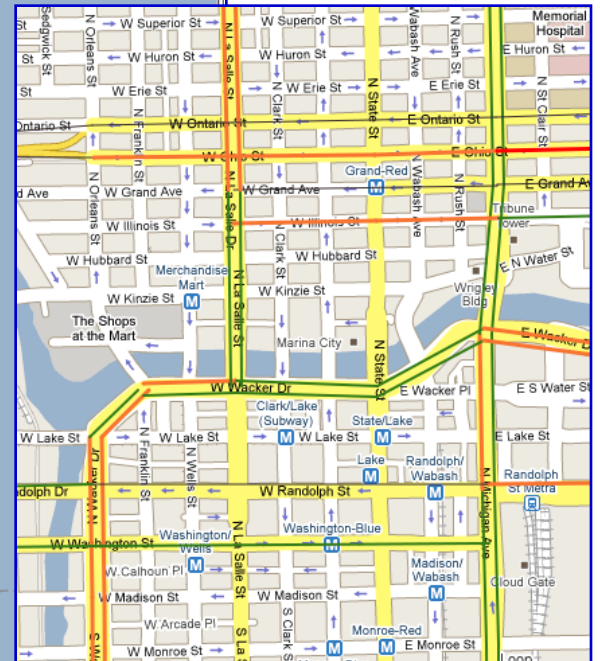
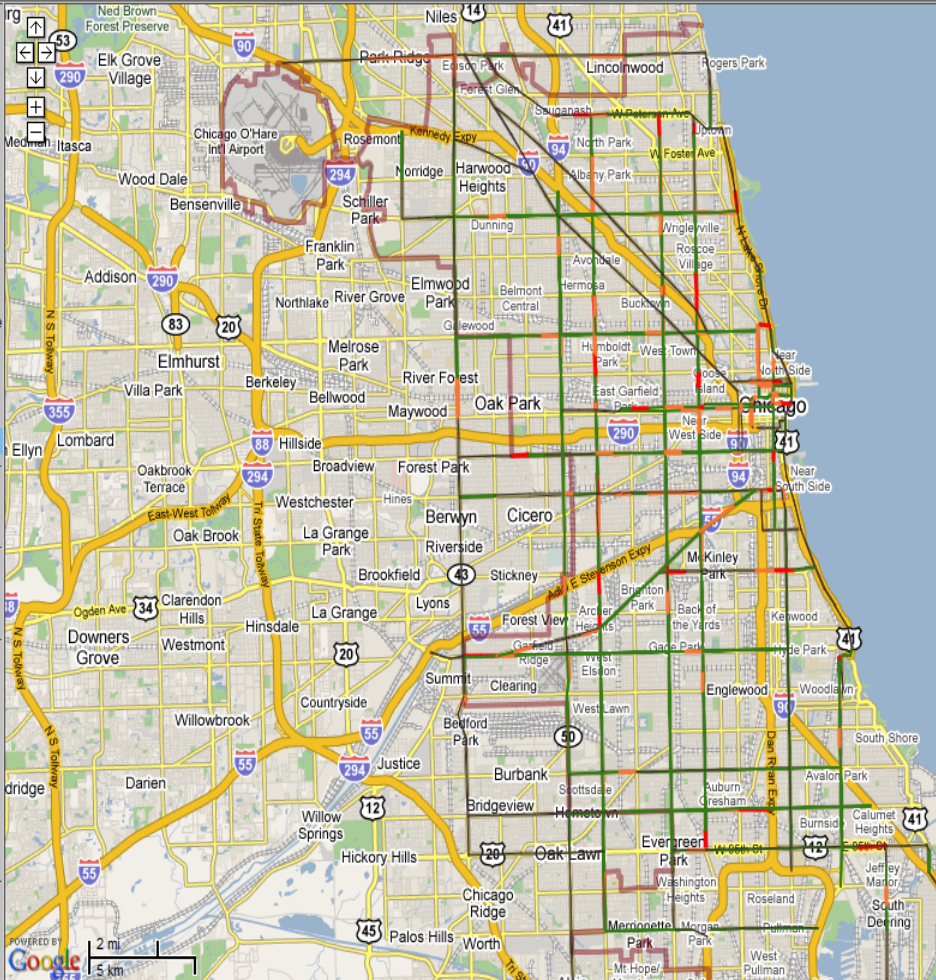
Only random markers visible at lower zoom levels. All markers are visible at zoom level 16 or above. Use mouse wheel or zoom control on map to zoom in/out.

Current Zoom Level: 11

Click on the markers on the map for details.

Turn on/off any of the available layers by selecting the check box(s) below.

- Traffic Count(ADT)
- Intersection Crashes
- Signals
- Real-time Traffic
- Redlight Cameras
- City Boundary



POWERED BY Google Maps

Map ©2009 Tele Atlas



# Detailed Information on Data Layers Available Though a Secure Website

## ADT

City of Chicago Average Daily Traffic Count (2006)  
 An OEMC Traffic Management Authority & CDOT Project

Jun 10, 2009 3:55 PM

Logout

Choose a Street...  
 At Intersection with (optional)... Go

Choose an ADT #... Go

Choose count type... Go

Representation of KIMBALL (6200 N to 1658 N): For cursory reference only. Not accurate for streets that goes in multiple directions.

ADT count(s) available for 7 location(s) on KIMBALL:

ADT ID	Location	ADT
15549	6067 N KIMBALL	
13920		
19595		
20051		
18079		
12144		
10360		

ADT count by 15 minute increments for ADT ID # 619 1820 ( between North Ave and Wabansia Ave ) Count Date: Oct 9, 2006

Segment	NB	Hourly	SB	Hourly	Total	Hourly
12:00 AM	15		17		32	
12:15 AM	13		13		26	
12:30 AM	6		19		25	
12:45 AM	2	36	14	63	16	99
01:00 AM	7		10		17	
01:15 AM	4		15		19	
01:30 AM	10		12		22	
01:45 AM	8	29	11	48	19	77
02:00 AM	10		12		22	
02:15 AM	6		6		12	
02:30 AM	4		6		10	
02:45 AM	7	27	5	29	12	56
03:00 AM	8		6		14	
03:15 AM	6		9		15	
03:30 AM	8		7		15	
03:45 AM	16	38	10	32	26	70
04:00 AM	15		13		28	
04:15 AM	19		19		38	
04:30 AM	15		13		28	
04:45 AM	20	69	14	59	34	128
05:00 AM	29		22		51	
05:15 AM	34		26		60	
05:30 AM	36		33		69	
05:45 AM	41	140	30	111	71	251
06:00 AM	56		37		93	

**Summary**

Category	Value	Notes
NB	4716	No Manual Count
SB	5844	No Vehicle Classification
Combined	10560	No Speed Count

**Peak Traffic Hours**

Category	AM Peak Hr	Volume	PM Peak Hr	Volume
NB	07:00	270	05:00	495
	AM-08:00 AM		PM-06:00 PM	
SB	07:45	429	06:00	427
	AM-08:45 AM		PM-07:00 PM	
Combined	07:45	877	05:00	808
	AM-08:45 AM		PM-06:00 PM	

**Location Information**

Ward: 26  
 Community: LOGAN SQUARE  
 Zip Code: 60647

**Count Categories:**

Type:\* Count  
 Method:\*\* Machine

**\*Four Types of Counts Taken**

Count	Vehicle Count Only
Count-Class	Vehicle Count & Vehicle Classification Count
Count-Speed	Vehicle Count & Vehicle Speed Count
Count-Class-Speed	Vehicle Count, Vehicle Classification Count and Vehicle Speed Count

## Traffic Signals

CITY OF CHICAGO TRAFFIC SIGNALS  
 Provided by OEMC Traffic Management Authority

Jun 10, 2009 5:15 PM

Select an intersection: 100TH ST MICHIGAN AVE

Select a Bureau of Electricity (BOE) Number: BOE Number...

BOE Number: 22404 Key Letter: A Signal Name: MICHIGAN-100TH Status: OPERATIONAL Address: South 10000 East 100

Mast Arm	Y	B Base	N	Near Right	N	Far Right	Y	Far Left	Y	MSA	N
Face Count	12	LED	null	# of Dials	1	Grade Separation	AT				

Signal Head Size: null Signal Head Comment: 3 sections on all approaches

Signal Controller: Type: Mechanical Actuated null Actuation Type: null Singal Model: null

Left Turn Arrow (LTA): LTA NB Actuated N Actuation Type null Install Date LTA EB LTA WB LTA SB

Interconnect: Name null Software null On Street System SEC./MICH.-99TH OSS Comment Ward updated on 02-08-04 3 sec yellow and no all red

Signal Comments: TIMING REV. 6-18-99 (15:00) IN CONJ. W/MICHIGAN-99TH MOD... Signal record last modified on Aug 28, 2008, Modified by: bnguyen

Timing: Cycle1 85 Cycle2 0 Cycle3 0 Cycle4 0 Cycle5 0 Cycle6 0 AllRed Y AllRed N/S 1 AllRed E/W 1 AllRed Diagonal 0 Yellow N/S 3 Yellow E/W 3 Yellow Diagonal 0 Installation Dt Jun 6, 2007 Change Requested null Change Req. Date null

Signals within half mile of 100TH ST and MICHIGAN AVE ( 10 signals, Nearest signal first)

ID	Signal Name	ID	Signal Name
0	MICHIGAN-100TH	1	MICHIGAN-99TH
4	KING-99TH	5	MICHIGAN-103RD
6	KING-103RD	7	WENTWORTH-99TH
8	KING-103RD	9	KING-97TH
		10	WENTWORTH-98TH

June 11, 2009   Helping drivers on roads and highways in the Lower Mainland get where you need to be.

Set as default tab

- Advisories
- Groups of Cameras
- Individual Cameras
- Bus Routes

- Map, Cameras, Advisories
- Highways
- Bridges and Tunnels
- Border Crossings
- Ferries
- Park and Ride
- Jack Bell Rideshare
- Parking Information
- Taxis
- Accessibility
- Drive BC Traveller Information

Interactive Map   Save   Reset   Clear   Legend   Fullscreen Map

Events   Cameras   Weather   Roads   Transit   Commercial   Marine   Air   Rail   Cycling

- Highway Message Signs
- Congestion
- Current Incidents
- Current Construction
- Current Events
- Border Crossings
- Park & Rides
- Landmarks
- Albion Ferry
- Facility Statuses
- Boundaries

Map   Satellite   Hybrid

POWERED BY Google

# Vancouver Traffic Website

<http://www.imove.ca/Motorists>

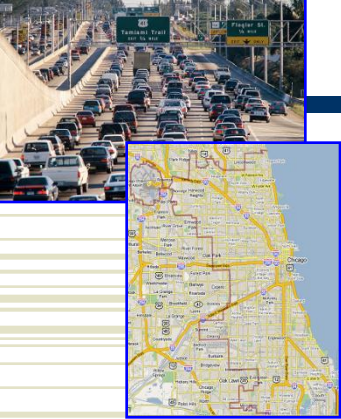


Advisories   Groups of Cameras   Individual Cameras   Bus Routes

FILTER BY: REGION: All SEVERITY: All   Reset

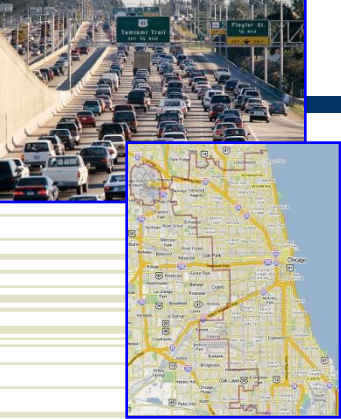
TYPE:  Current Incidents    Current Construction    Current Events  
 Future Construction    Future Events    Future Service Disruptions

	LOCATION	TYPE	SEVERITY	REPORTED	CLEAR
+	88th Ave E Between Glover Rd And Bartlett St	e	Minor	Jul 1 2009 8:00 AM	
2	Canada Day Populaire Bike Ride, starting at Ft. Langley Lions Hall at 8:00am				See more details >>
+	88th Ave W Between Glover Rd And Bartlett St	e	Minor	Jul 1 2009 8:00 AM	
1	Canada Day Populaire Bike Ride - starting at Ft. Langley Lions Hall at 8:00 AM				See more details >>
+	44th Ave E Between 207A St And 208th St	e	Minor	Jun 28 2009 9:00 AM	
2	Tri-It Triathlon Bike Route				See more details >>



# Technology

- ◆ Google Map API
- ◆ Oracle Database
- ◆ Java/JSP/Java Script/Jason



# Considerations

- ◆ Works faster on FireFox and Chrome browsers.
- ◆ Hundreds of markers on the map will cause the map/website to operate slow.
- ◆ Website performance is depended on the computer's memory.
- ◆ Google licensing does not permit linking the website with any internal applications.



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Questions?