Interstate H-3 Freeway Opens

December 12, 1997 at 3 p.m.

Notice to Motorists

State of Hawaii Department of Transportation

H-3 is Driver Friendly

Tunnel Systems Make Driving Safer

The tunnel systems in H-3 will monitor for incidents such as vehicular fires, accidents and disabled vehicles. The primary monitoring is through the use of standard traffic loops spaced about 500 feet apart.

Each vehicle is sensed, its size and speed are calculated, and its time to the next set of loops is projected. As long as the vehicle reaches the next set of loops within an allowable margin of the projected time, nothing happens. If the vehicle changes speed or stops, an alarm will be sent to the traffic control operator. The operator verifies the occurrence through the closed circuit television system, then responds accordingly.

Changeable and variable message signs, lane use signals and traffic signals are all available to the operator. In addition to signage, the operator also has the ability to override all AM and FM radio frequencies, and send voice messages to any vehicle with an operative radio.

All primary equipment communication is conducted through fiber optic cable to maximize the speed of communication while minimizing the cost of conduit and cable. Nearly 25 miles of 48 fiber cable and almost five miles of multi-mode fiber have been installed.

The state of the art Traffic Operations Center is located between the Halawa portals of the tunnels and will be operated 24 hours a day, 365 days a year. It will be staffed by highly trained tunnel operators and maintenance personnel. The tunnel was constructed in six separate construction packages totaling $300 million.

A team of traffic control operators work around the clock, 365 days a year, to make sure traffic runs smoothly through the tunnel.

Car Trouble on H-3?

The H-3 Traffic Operations Center (TOC) is open 24 hours a day, 365 days a year to assist you. Here's what to do if you have car trouble on H-3:

- Drive your car out of the traffic lane and onto the shoulder lane if possible.
- When it's safe, get out of your car and put the hood up.
- Walk to the nearest Emergency Call Box. They're located on both the inbound and outbound sides of the freeway every quarter-mile. In the tunnel, call boxes are located on both tunnel walls so you will not have to cross the highway to get to a phone.
- Open the Emergency Call Box and lift the phone handle. It will connect you directly to the TOC. Explain your problem. The TOC will dispatch necessary services. Once notified, the TOC will be able to monitor your vehicle through highway cameras and take any additional action required.
- Follow all directions given you by the TOC.
- Wait for help.

A motorist uses an Emergency Call Box.

Frequently Asked Questions About H-3

Who Should Use the H-3?

The H-3 was designed to be used by motorists traveling from Windward Oahu to destinations in Halawa, Pearl Harbor, Hickam Air Force Base, Pearl City, Honolulu International Airport, and Leeward and Central Oahu. It is not designed to bring Windward motorists into Downtown Honolulu, but does serve as an alternate route if Pali or Likelike highways are closed.

Where Do I Get On and Off H-3?

There are five conveniently located interchanges where you may get on and off H-3. Four are on the Windward side. The Kailua and Mokapu Boulevard interchanges have been open for many years. The new interchanges are located at Kamehameha Highway (Halekou Interchange), and Likelike Highway (Kaneohe Interchange).

In Halawa, you will be able to access Moanalua Freeway (eastbound), H-1 (east and westbound) and Kamehameha Highway (east and westbound via Kahuapaani Street).

See interchange maps on page 4.

Will H-3 Help Traffic Congestion on Pali and Likelike?

Yes. There are presently almost 120,000 vehicle trips every day on Pali and Likelike Highways. Traffic engineers estimate that about one-third of the Trans-Koolau traffic will eventually use H-3, thereby eliminating some trips on Pali and Likelike.

Will My Radio Work in the Tunnel?

Yes. The Trans-Koolau tunnels have AM/FM rebroadcast antennas so your car radio will work in the tunnels.

Will my Cellular Phone Work on H-3?

Eventually. Cellular phones work on the Haiku side of the H-3 now. Cellular phone companies are currently installing cellular telephone antenna sites for Halawa Valley and the tunnel. They should be on line soon.

Can Bicycles and Mopeds Use the H-3?

No. H-3 is an Interstate Freeway with a speed limit of 55 mph. Only cars, trucks and motorcycles may drive on H-3.

Are There Any Scenic Lookouts?

H-3 is an Interstate Freeway and does not have scenic lookouts because much of it is built on viaducts.

Is H-3 Safe for People With Pacemakers?

Yes. The Coast Guard's Haiku Omega Station has been decommissioned and the antenna removed. The electromagnetic field is no longer active.

Can Trucks Use H-3?

Yes. Interstate routes are open to all vehicles. There are two run-away truck ramps. On the Windward side, the ramp is located just after H-3 crosses Likelike Highway. On the Leeward side, the ramp is located four miles down from the Trans Koolau Tunnel in Halawa Valley, approximately one mile from Halawa Interchange.

Will Any Buses Use H-3?

Yes. The Bus Express Routes 86 and 86A will use H-3 to get from the Windward side to the Naval Supply Center at Pearl Harbor.

Cross Passages

Cross Passages are located about every 500-feet in the H-3 Tunnels. They connect the inbound and outbound bores and will be used in case of evacuation of the tunnel. A flashing beacon and lighted sign are located at each cross passage to mark the entrance. There are also Emergency Call Boxes and traffic signals located at each cross passage.

How the H-3 Tunnel Operates

A. Transitional Tunnel Lighting. Entrance brightness adjusts based on day and night conditions.

B. Exhaust Fans. Fans are located in the four portal buildings to remove exhaust through ceiling ducts.

C. Emergency Call Boxes. Connect to Traffic Operations Center to assist motorists who are stalled or involved in a crash. Located on both tunnel walls at every cross passage and at quarter-mile intervals along freeway.

D. Cross Passages. There are 10 cross passages, located about every 500 feet in the tunnels. They provide emergency access between the Halawa and Kaneohe-bound tunnel bores.

E. Rebroadcast Antennas. Provide two-way radio for police, fire, ambulance and highway maintenance workers. Also provide radio rebroadcast and override system so that tunnel operators can inform drivers of tunnel emergencies through their car radio.

F. Linear Heat Detectors. Located above traffic lanes. Monitor for excess heat/fires in tunnel.

G. Electronic Message Signs. Allow tunnel operators to warn motorists of tunnel problems. They will only be turned on when an incident occurs or for lane/bore closures for maintenance. Located at entrance and even numbered cross passages, approach roadways and crossovers.

H. Lane Control Devices. Inform motorists which lane to use. A green arrow means the lane is open. A red X means the lane is closed. Motorists should only drive in a lane with the green arrow. Will only be turned on when an incident occurs. Located at tunnel entrance and odd number cross passages, cross passage #2 and crossovers. The Lane Control Devices are used for lane closures, as well as contraflow.

I. Fresh Air Vents. Fans in each portal force fresh air into the tunnel through these vents. The fans are turned on whenever the carbon monoxide level reaches a predetermined level. Most of the year, the tradewinds blow through the tunnel at 5-10 mph so the fans may not be needed.

J. Runoff Drains. Located at the edge of the road to collect run off tracked in by vehicles and spills from the tunnel. Runoff is collected and held in storage tanks at either end of the tunnel and then disposed.

K. Fire Boxes. Contain fire extinguisher and hoses to fight fires in the tunnel. Located every 125 feet in tunnel.

L. Magnetic Loops. Imbedded in the roadway of the tunnel to detect direction and speed of vehicles. Similar to loop detectors that activate traffic signals. Monitor for traffic incidents.

M. Smoke Detectors. Located in Portal Buildings, TOC Operations and Maintenance Facility and cross passages.

N. CO Detectors. Monitor carbon monoxide levels in the tunnel and automatically alert tunnel operators when the level reaches a predetermined point. Located every 1,000 feet at odd number cross passages and in exhaust plenum.

O. Traffic Signals. Will be activated whenever there is an incident requiring traffic to stop. Will be activated in conjunction with signs. Located at every cross passage and entrances to tunnels.

P. Video Cameras. Provide tunnel operators a first hand look at traffic in the tunnel, and enable them to zero in on any location where a sensor goes off. Located at every cross passage, and at quarter-mile intervals along the freeway.

Q. Weather Station. Used to monitor wind and rain conditions. Information will be used on Electronic Message Signs and to adjust ventilation rate. Located at each end of tunnel and at cross passage five.

R. Safety Walks. There are safety walks on the sides of each tunnel for maintenance purposes.

Electronic Message Signs

Lane Control Devices

Smart Tunnel Aids Drivers

The H-3 Tunnel is state-of-the art and contains numerous systems to make driving safer and more pleasant for drivers.

Whenever an incident occurs on H-3, drivers will be notified via electronic highway signs located at the Halekou, Kaneohe and Halawa Interchanges. The signs will advise motorists whether the tunnel is open or closed.

If you are already on the freeway when the incident occurs, the signs will direct you through the problem area.

Should you be required to stop and evacuate your vehicle in the tunnel, the signs will direct you to the nearest cross passage.

The signs will only be lighted when they are needed to convey information.

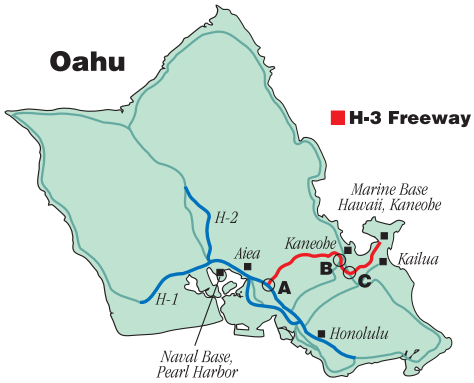
Lane Control Devices

H-3 is the first highway project in Hawaii to use Lane Control Devices. They inform motorists which lane to use. The Lane Control Devices at the tunnel will be used to indicate lane closures as well as contraflow operations.

The Red X and Green Arrow signs are located about every 500-1000 feet above the traffic lanes in the Trans-Koolau tunnels. A green arrow means the lane is open. A red X means the lane is closed. Motorists should only drive in a lane with the green arrow.

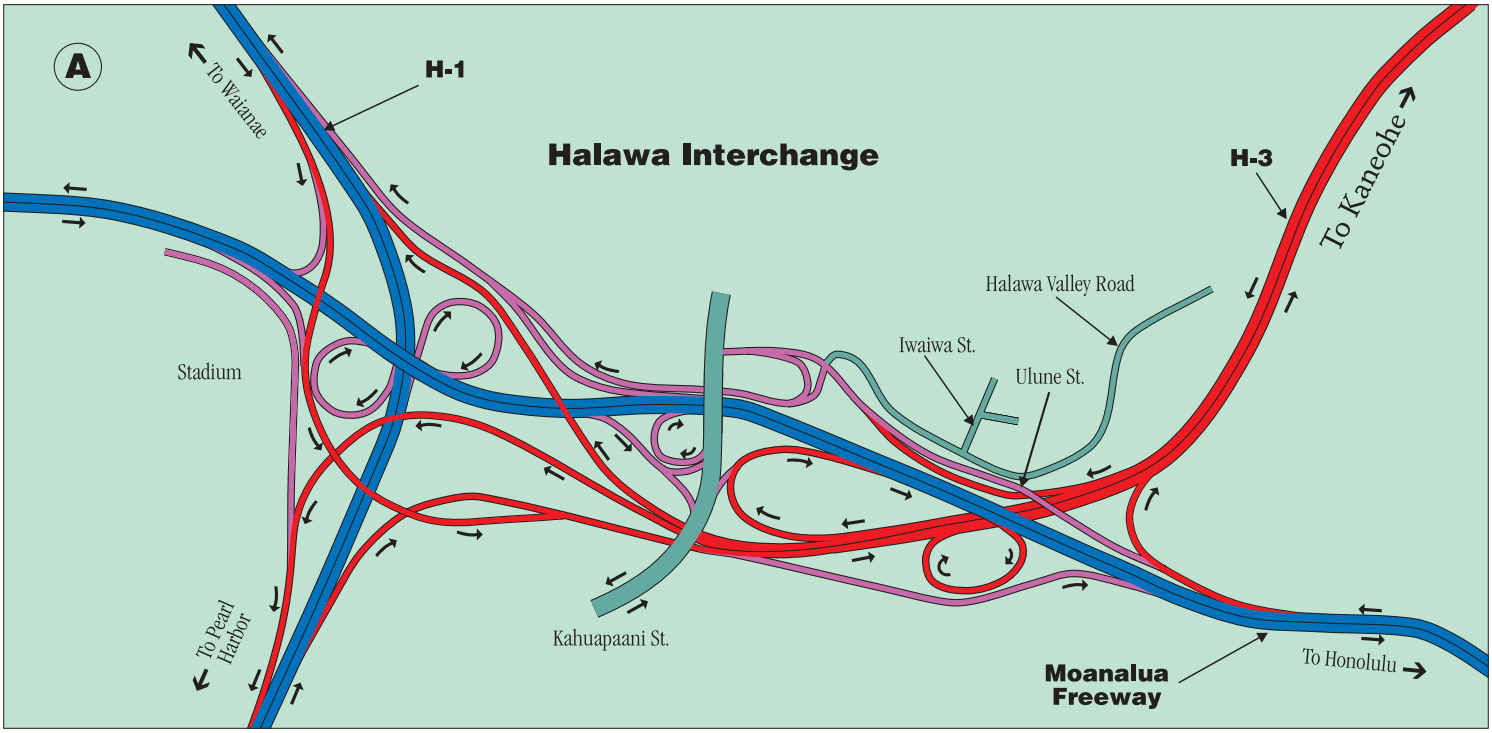
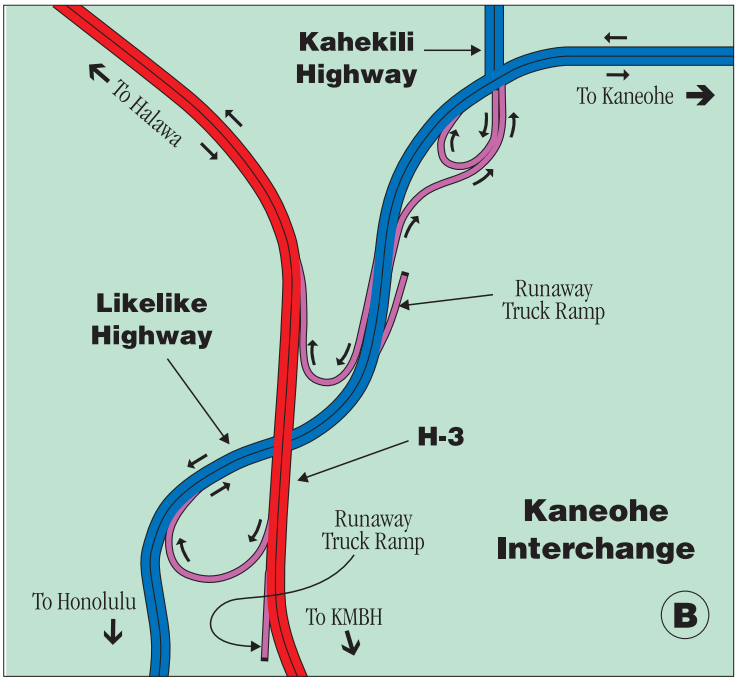
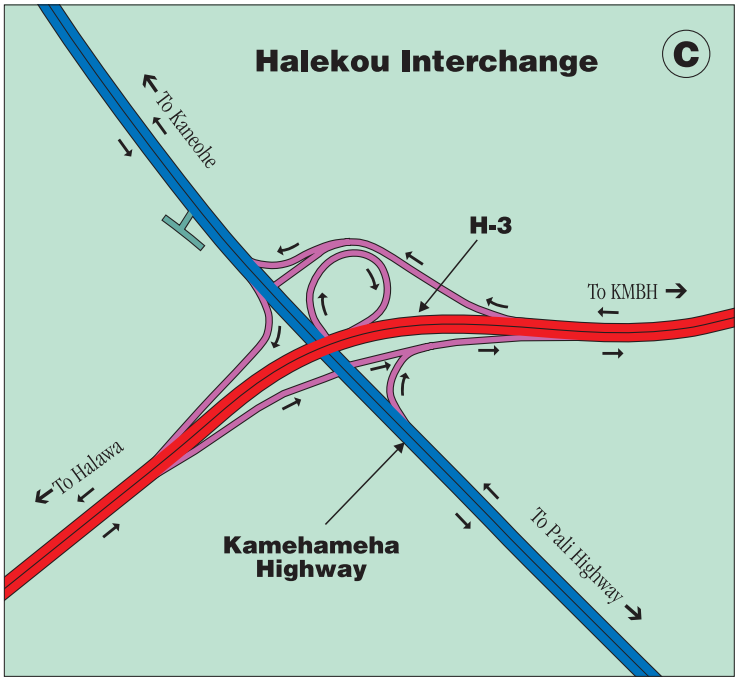
The Red X and Green Arrow signs will only be lighted when an incident occurs or when maintenance is being performed in the tunnel.

H-3 Interchange Maps



The H-3 Freeway has one of the most spectacular mountainous drives in the nation as it connects Leeward and Windward Oahu though a mile long Trans-Koolau Tunnel.

The new Interstate freeway begins in North Halawa Valley, climbs to the portal of the Trans-Koolau Tunnel, tunnels through ancient lava rock, emerges into the scenic Haiku Valley, soars on a graceful viaduct, hugs Hoomaluhia Park, and ends 16.1 miles later at the entrance to Marine Base Hawaii at Kaneohe.

H-3 has five conveniently located interchanges, two of which have been open for many years. The new interchange on the Windward side is the Kaneohe Interchange and additional H-3 ramps will be opened at the Halekou Interchange and the Halawa Interchange.

Although areas of the interchanges may look complicated on the maps, the on-ramps to H-3 and off-ramps from H-3 are well-marked. By carefully following the signs you will get to where you want to go.