



## VI. Traffic Management

The goal for traffic management is to ensure safety and the smooth running of traffic. In 2008, the average daily traffic volume passing through toll stations is 1.485 million vehicles with a reduction compared to last year by -4.6%. Of these, the majority consist of small vehicles, which comes to 83.5%. In 2008, the Bureau worked on numerous projects in the hopes of improving the traffic efficiency. These include numerous improving measures and further details as outlined below.



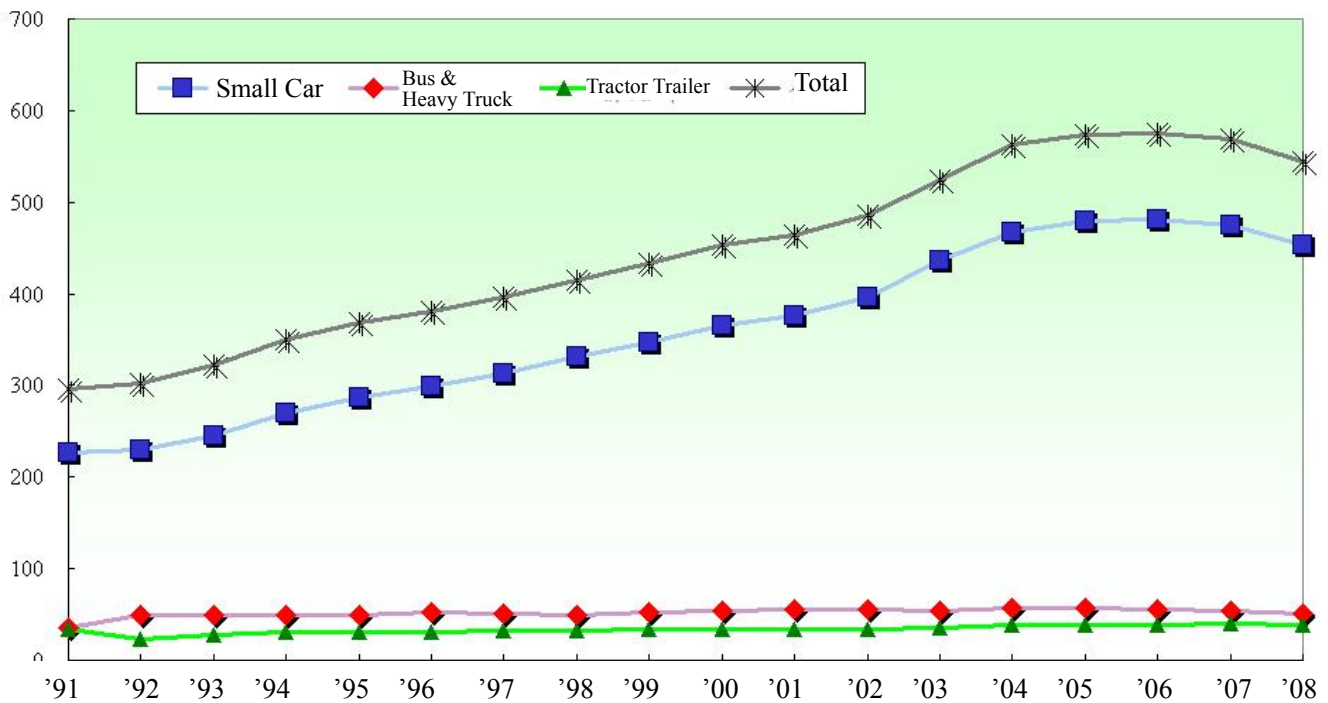
### 1) Traffic Volume Over Years

#### (1) Statistics of Traffic Volume Passing Through Toll Stations from 2007 to 2008

Year	Small Car	Bus / Heavy Truck	Tractor Trailer	Total	Yearly Growth Rate	Million Vehicles Kilometer
2007	475,502,719	54,347,929	39,791,876	569,642,524	-0.88%	25,950.0
2008	453,931,505	50,347,601	39,268,902	543,548,008	-4.58%	24,649.9
Total	929,434,224	104,695,530	79,060,778	1,113,190,532	-2.73%	50,599.9

#### (2) Map of Traffic Growth over Years

Million Vehicle



#### (3) National Holidays Traffic Volume Statistics

The highest traffic volume in 2008 was in the Chinese New Year holiday on February 9<sup>th</sup>, 2007. 2.765 million vehicles passed through the tolls and the volume was above the design service flow rate by 64.61%



### Comparison Table of Traffic Volume Passing through Toll Stations in National holidays of 2007 and 2008.

Holiday	Average Daily Traffic Volume in 2006 : 1,574,557				Average Daily Traffic Volume in 2007 : 1,560,664			
	Date (2007)	Week	Passing Traffic Volume	Over Designed Service Capacity by rate%	Date (2008)	Week	Passing Traffic Volume	Over Designed Service Capacity by rate%
New Year's Day	12.30	Sat	2,117,038	26.01%				
	12.31	Sun	1,993,046	18.63%	*1.01	Tue	1,591,327	-5.28%
	*1.01	Mon	1,914,265	13.94%				
Chinese New Year holidays	*02.17	Sat	2,069,888	23.21%	*02.06	Wed.	1,882,050	12.03%
	02.18	Sun	2,220,623	32.18%	02.07	Thu	2,189,886	30.35%
	02.19	Mon	2,673,693	59.15%	02.08	Fri	2,694,129	60.36%
	●02.20	Tue	2,941,305	75.08%	02.09	Sat	2,765,416	64.61%
	02.21	Wed	2,879,970	71.43%	02.10	Sun	2,719,826	61.89%
	02.22	Thu	2,671,216	59.00%	02.11	Mon	2,156,857	28.38%
	02.23	Fri	2,258,887	34.46%				
	02.24	Sat	2,053,429	22.23%				
02.25	Sun	1,753,559	4.38%					
228 Memorial Day	*02.28	Wed	1,459,257	-13.14%	*02.28	Thu	1,441,093	-14.22%
Tomb Sweeping Festival	*04.05	Thu	2,528,089	50.48%	*04.04	Fri	2,558,799	52.31%
	04.06	Fri	2,031,035	20.89%	04.05	Sat	2,047,270	21.86%
	04.07	Sat	1,976,041	17.62%	04.06	Sun	2,102,968	25.18%
	04.08	Sun	1,914,470	13.96%				
Dragon Boat Festival	06.16	Sat	2,188,036	30.24%	06.07	Sat	1,755,624	4.50%
	06.17	Sun	2,122,873	26.36%	*06.08	Sun	1,712,582	1.94%
	06.18	Mon	1,953,345	16.27%				
	*06.19	Tue	1,765,437	5.09%				
Moon Festival	09.22	Sat	2,216,076	31.91%	09.13	Sat	1,063,331	-36.71%
	09.23	Sun	2,227,590	32.59%	*09.14	Sun	1,266,025	-24.64%
	09.24	Mon	2,075,383	23.53%				
	*09.25	Tue	1,910,881	13.74%				
Double Ten National Day	*10.10	Wed	1,337,963	-20.36%	*10.10		2,166,237	28.94%

Note: 1. Designed Service Flow Rate is 1.68 million PCU  
 2. \* Holiday      ● Highest Traffic Volume Day of This Year.  
 3. Data source: Provide by all toll stations.



## 2) Traffic Accident Analysis

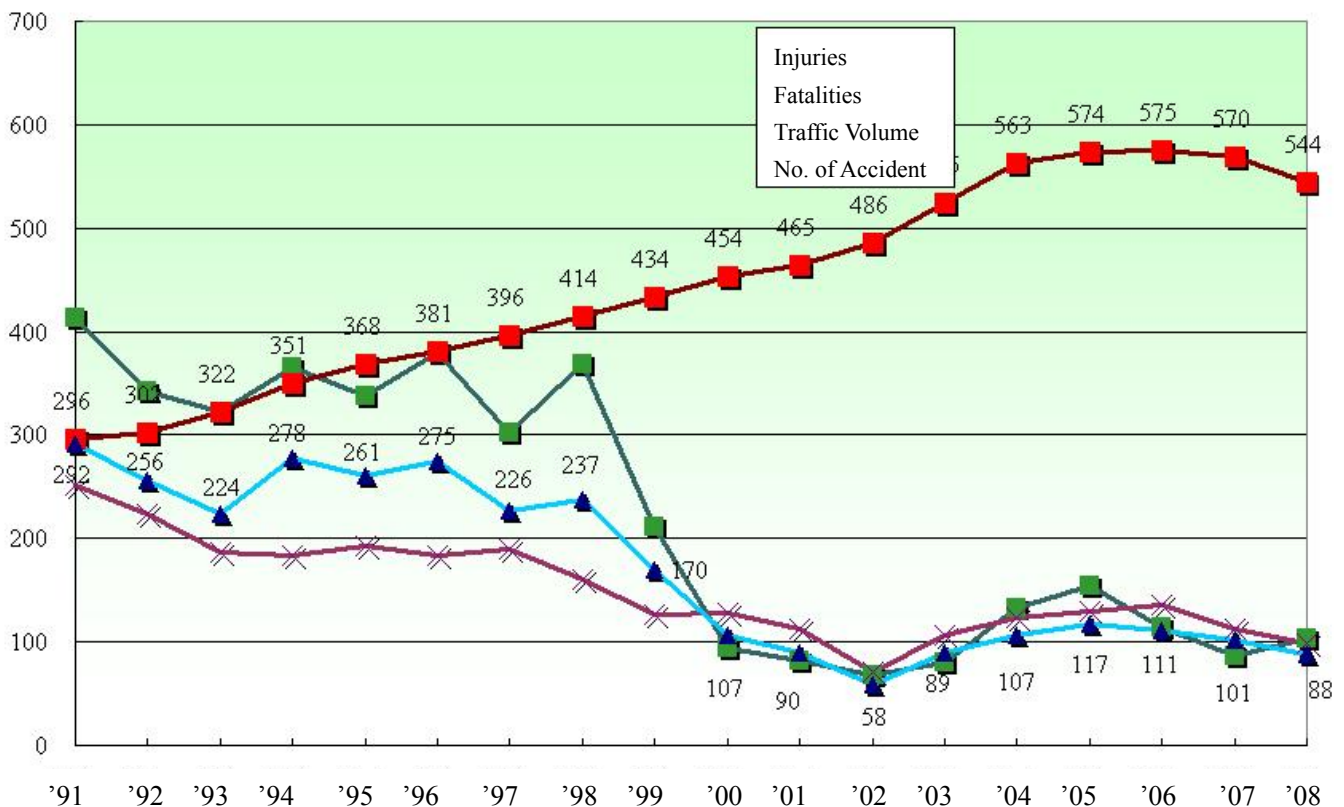
There were 88 A1 type traffic accidents on the freeway in 2008, with 98 fatalities and 104 injuries. The accident rates was 0.00357 case per million vehicle kilometers (MVK), with 0.00398 fatality per MVK and 0.00422 injury per MVK.

Compared to 2007, accident rates dropped by 8.3%, fatality rates dropped by 7.9% and injury rates dropped by 27.3%. In term of the analysis of accident causes, 13 cases of each of improper driving and intoxicated driving (14.8%), and 11 cases of defective tire and wheel coming off vehicles (12.5%) are 3 major causes of accidents in 2008 which consist of 42.1%. In term of vehicle types involved in accidents, heavy trucks and tractor trailers have a higher rate of accidents.

### (1) Accident Statistics in 2003-2007

Year	Million Vehicles Km (MVK)	Number of Accidents (case)	Accident Rate (case/MVK)	Death (Person)	Death rate (Person/MVK)	Injury (Person)	Injury rate (Person/MVK)
2007	25,950.0	101	0.0039	112	0.0043	86	0.0033
2008	24,649.9	88	0.0036	98	0.0040	104	0.0042
<b>Total</b>	<b>50,599.9</b>	<b>189</b>	<b>0.0037</b>	<b>210</b>	<b>0.0042</b>	<b>190</b>	<b>0.0038</b>

### (2) Map of Traffic Growth and Number of Accident Over Years

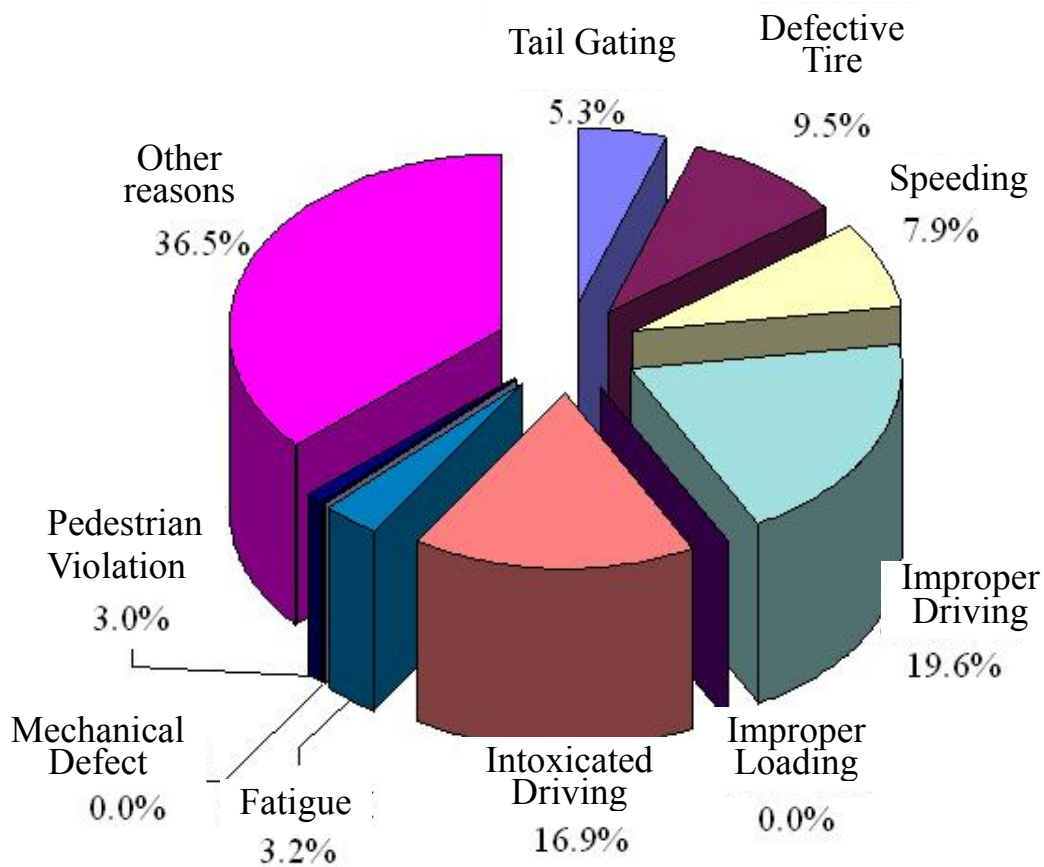




### (3) Accident Causes Analysis in 2007-2008

Year	Tail Gating	Defective Tire	Speeding	Improper Driving	Improper Loading	Intoxicated Driving	Fatigue	Mechanical Defect	Pedestrian Violation	Other reasons	Total
2007	5	7	6	24	0	19	4	0	0	36	101
2008	5	11	9	13	0	13	2	0	2	33	88
Total	10	18	15	37	0	32	6	0	2	69	189

### (4) Diagram of Accident Causes Analysis in 2003-2007

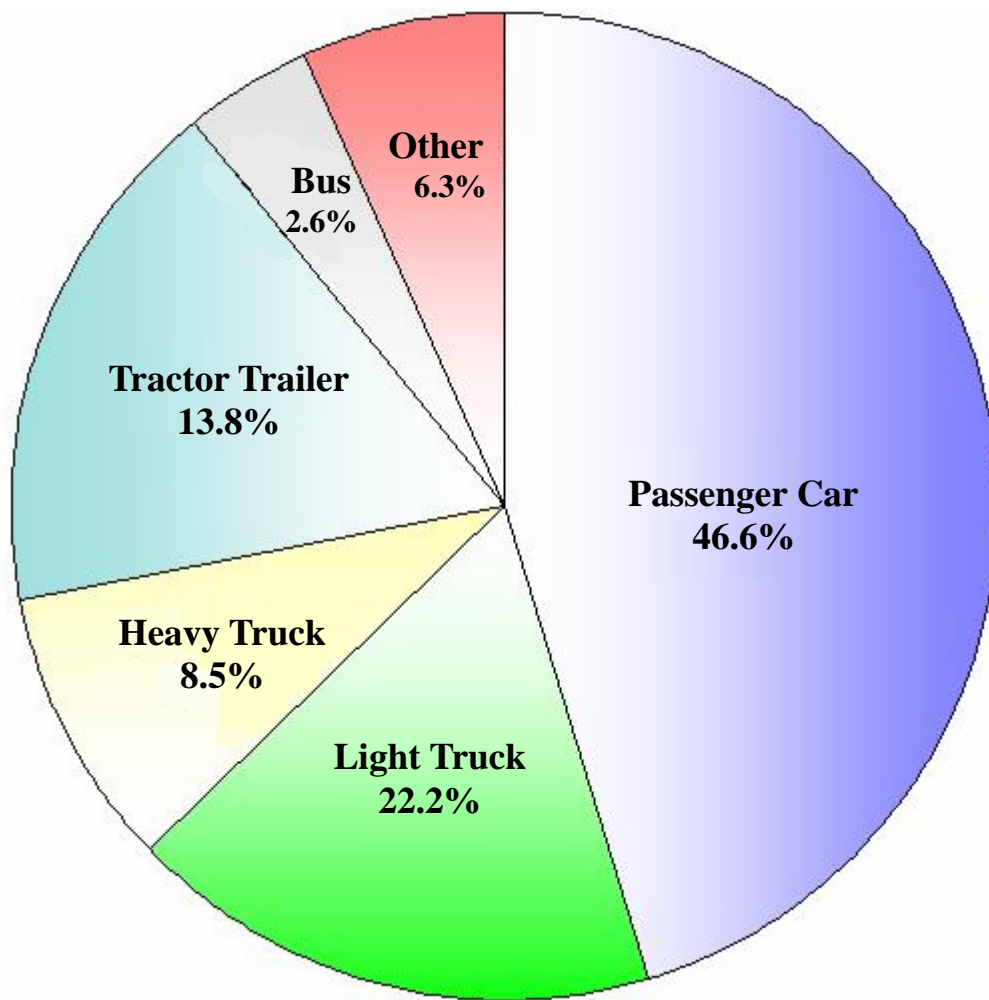


### (5) Vehicle Types Involved in Accident Statistics in 2007-2008

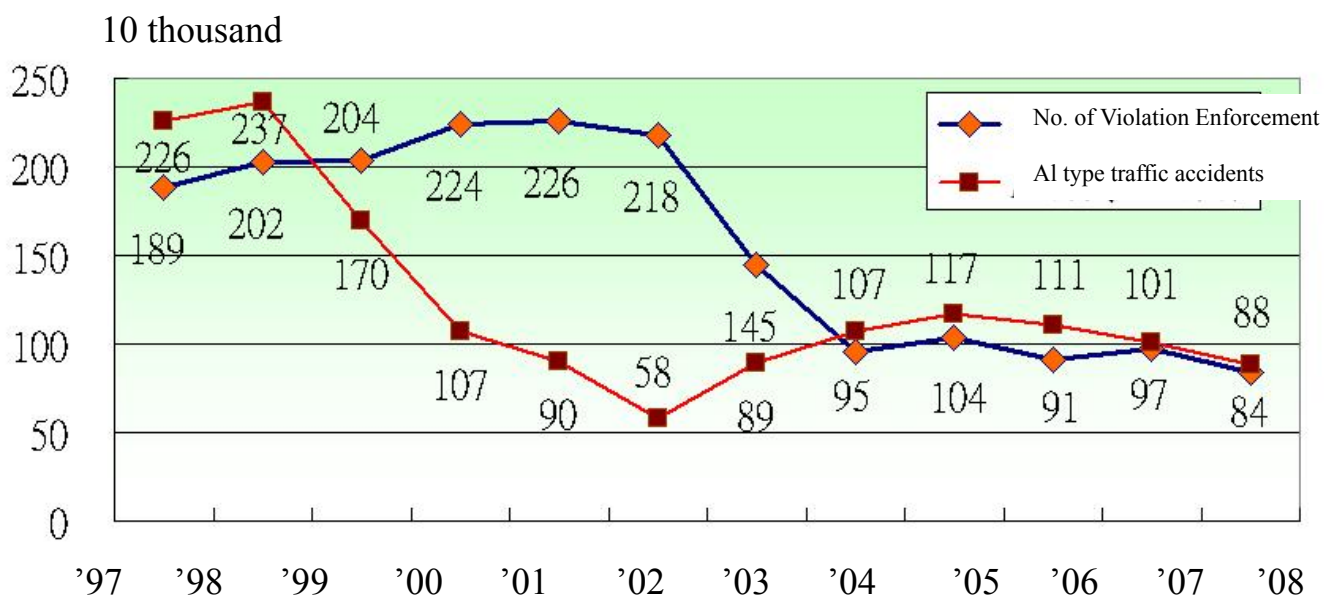
Year	Passenger Car	Light Truck	Heavy Truck	Tractor Trailer	Bus	Other	Total
2007	42	23	7	18	4	7	101
2008	46	19	9	8	1	5	88
Total	88	42	16	26	5	12	189



**(6) Diagram of Vehicle Types Involved In Accident in 2003-2007**



**(7) Accident and Violation Enforcement Analysis in 1997-2007**





### 3) Reviewed and adjusted Speed Limit

#### (1) East section of Renwu Interchange of National Freeway No. 10

The former speed limit of National Freeway No. 10 was 80 km/Hr on west section and East section of Yanchao System Interchange. Due to the lower speed limit compared to other national freeways, there have been continuous requests by the public to increase the speed limit. The Bureau has reported to and approved by the Ministry of Transportation and Communication (MOTC) and increased the speed limit to 100 Km/Hr on east section of Renwu Interchange, beginning from September 1<sup>st</sup>, 2008.



New speed limit signs on East of Renwu Interchange of National Freeway No.10

#### (2) Daan bridge (North of Taian Service Area) to Nanzih Interchange sections of National Freeway No. 1

In consideration of public familiarity with the finished widening projects in 2007 and good driving condition in these sections, the Bureau reviewed and planned to increase the speed limit between Daan bridge (North of Taiwan Service Area) to Nanzih Interchange from 100 to 110 km/Hr. The proposal was sent to the MOTC and executed since March 16th, 2008.



New Sign Setup



National Freeway speed limit at 110 Km/Hr

### (3) Nangang system Interchange to Toucheng Interchange section of National Freeway No. 5

The maximum speed limit on Nangang System Interchange to Toucheng Interchange section was unified after the maximum speed limit in Hsuehshan Tunnel was raised to 80 km/Hr since March 16th, 2008. In order to facilitate faster traffic operation, the minimum speed was raised from 50 to 60 km/Hr since May 1st, 2008.



National Freeway No. 5 Shueshan tunnel northern exit speed limit signs setup.





#### 4) Traffic Reliving Measures during long holidays

The Chinese New Year holiday in 2008 began in February 6th (Wednesday) to February 11th (Monday) for 6 days. To relief traffic conditions, various measures, such as temporarily suspending toll collection, ramp metering control, high occupancy vehicle, closing of entrance ramp and opening of road shoulders were used. Except the duration of ramp metering control was extended on some days due to traffic conditions, other measures are all carried out in accordance with the plan.

Besides, during major holidays such as Tomb Sweeping Festival, National Day, the traffic on freeways can be more smoothly.

2008 Traffic Relieving Measures Operated in Each Holiday:

Traffic Relieving Measure	Chinese New Year Holiday	Tomb Sweeping Festival	National Day
Toll-free period	◎	◎	◎
Entrance-ramp metering control	◎	◎	◎
Exclusive use of high occupancy vehicle	◎	—	—
Entrance-ramp Closure	◎	—	—
Opening of road shoulder	◎	◎	◎

Note: ◎ operated actions

#### 5) Improvement to freeway bottleneck sections

##### (1) Opening of road shoulders and adding auxiliary lanes

To improve congested sections during peak traffic hours, the Bureau implemented the following in 2008:

- a. 32.7 km eastbound of Cishan interchange of National Freeway No. 10 will begin opening road shoulder for small vehicles from August 1st, 2008 in the weekends from 9:00 -13:00.
- b. There is an additional auxiliary lane for the Wudu southern interchange section between two entrance-ramps on National Freeway No. 1. The access road is widened to 3 lanes from 2 (2+1 auxiliary lane). This project was completed on November 5th, 2008.



- c. To relieve traffic congestion for the northbound traffic on the National Freeway no. 5 Hsuehshan tunnel, the road shoulder will begin opening for small vehicles from July 13th, 2008 in the weekdays from 13:00 -21:00 and more, depending on traffic conditions.

In addition, to coordinate with the local interchange adding/modifying projects, the opening of road shoulders of the following sections for small vehicles was discontinued:

- (a) National Freeway No. 1 Keelung to Wudu southbound section from December 16<sup>th</sup>, 2008.
- (b) National Freeway No. 1 Wugu to Taiguan Center southbound section from October 17th, 2008.



National Freeway No. 1 Wudu southern interchange section is widened to by auxiliary lanes to 3 lanes from 2.



## (2) Traffic improvements for National Freeway No. 5

- a. Observing of National Freeway No. 5 Hsuehshan Tunnel northbound traffic congestion occurs during weekends. Hsuehshan Tunnel's length is 12.9 km and its slope is 1.255%. The section with long length and slow slope is not easily noticeable. But its character will influence traffic movements. Using the experiences of other nations, tests was conducted using currently existing equipment (ex: changeable message sign, broadcast) by informing the drivers of congestion information and the reason for these congestion. Allowing the driver to be prepared and have better control of their gas peddle, reducing the need to break and slow down traffic. An overall improvement of traffic movement by 9% was observed, with the highest increase in traffic speed within 3 km of the tunnel entrance above 15% improvement.
- b. In order to improve traffic order for northbound entry into National Freeway No. 5 at Yilan, Luodong and Su'ao. Traffic cones are placed near toll stations as a trial from June 6th, 2008 to reduce cutting in and unnecessary lane changes. The trial shows an improvement in traffic flow.



Yilan interchange entrance toll station traffic cone placement to improve traffic order.



c. Traffic movement improvement

(a) National Freeway No. 1 Taichung system interchange

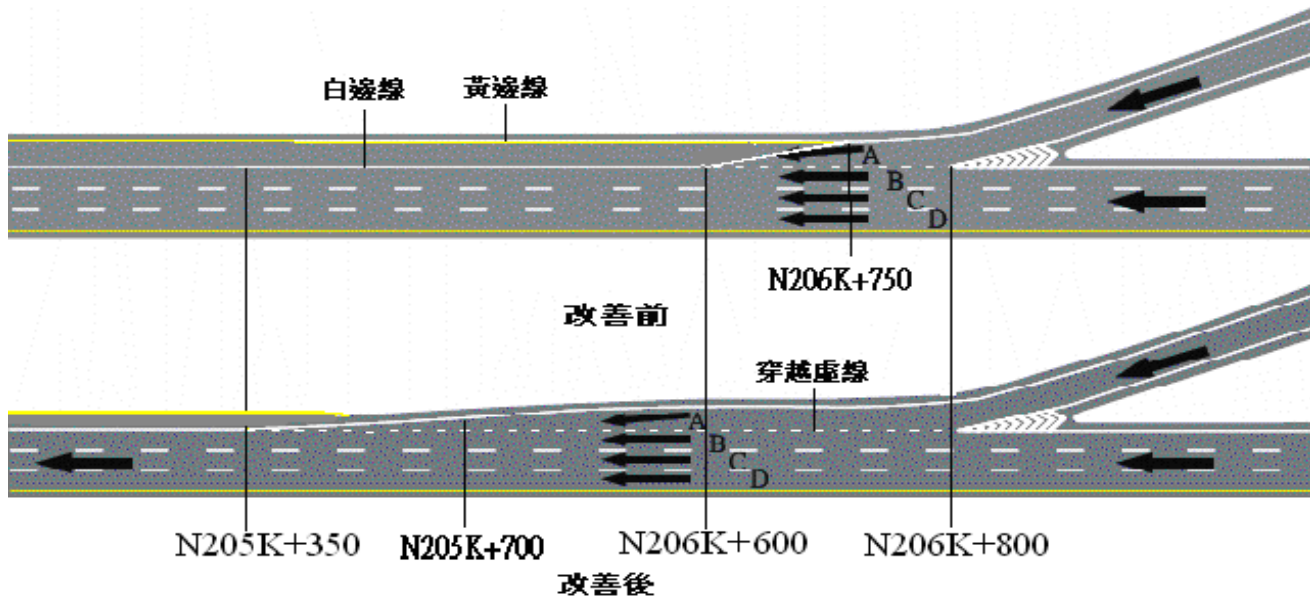
The 2 laned Acceleration lane of Southbound traffic exiting National Freeway No.1 to National Freeway No.4 and Northbound traffic entering National Freeway No.1 from National Freeway No.4 will merge going into one lane and result in traffic backing up. The Bureau has invited the Freeway Police and other agencies to discuss and concluded that reducing the 2 lanes to 1 lane will solve this problem and the related works are completed by July 2008. The Bureau will continue to observe the results of this change.



Adjustments to 2 laned access road of Southbound traffic exiting National Freeway No.1 to National Freeway No.4 (towards Dongshi).  
The 2 lanes are reduced to 1 lane traffic.

(b) National Freeway No. 1 Northbound Puyan Interchange

When northbound traffic enters National Freeway No.1 from Provincial highway 76, the main lane will often be congested and it is more serious during peak traffic. The acceleration lane is extended from 206k+600 to 205k+350, the project was completed by October 15<sup>th</sup>, 2008 and traffic conditions have improved as a result of the change.



A diagram of access lane changes entering National Freeway No. 1 at the Puyan system interchange.

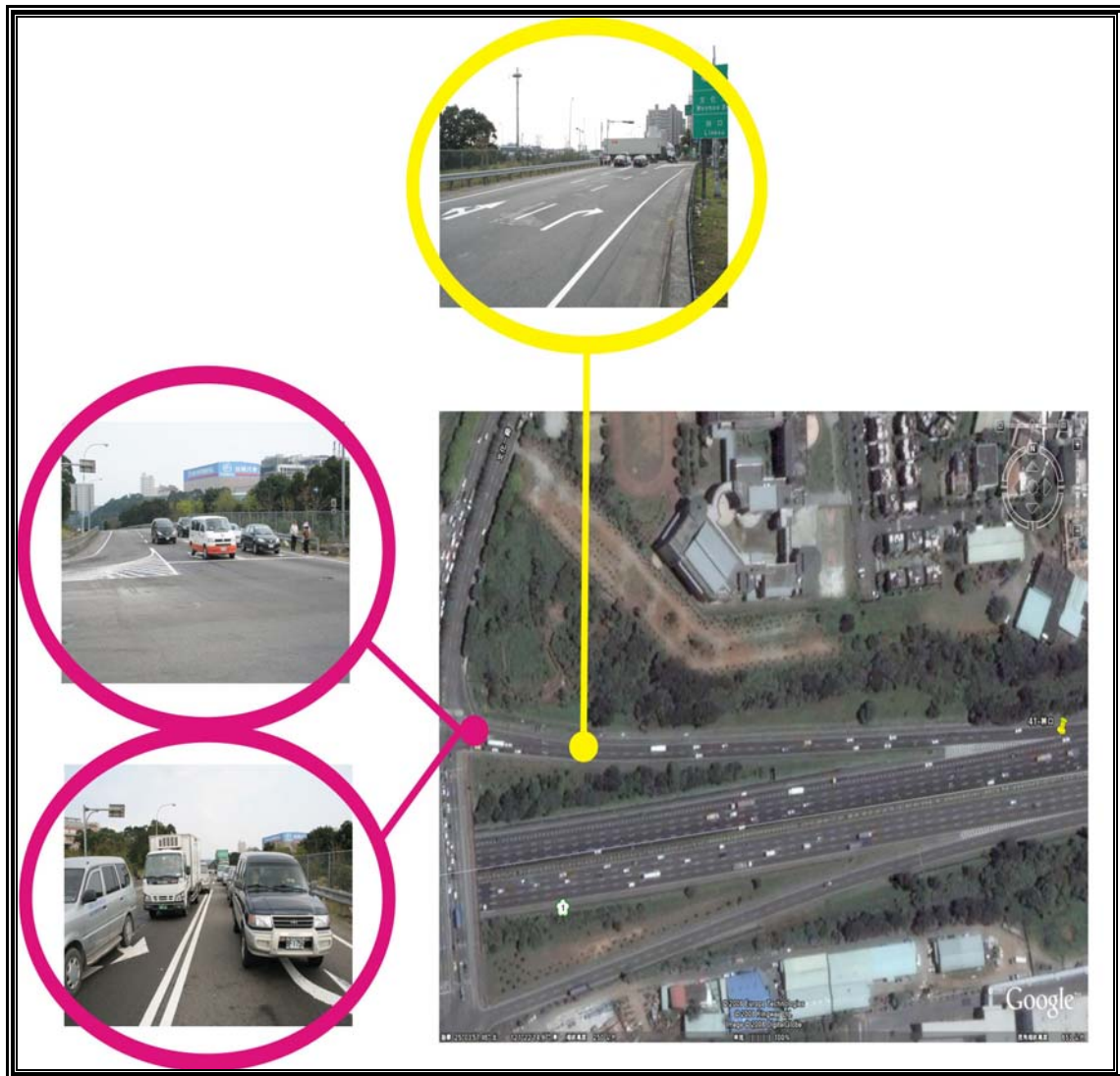


Photo of the extended access lane northbound entering National Freeway No. 1.



(c) National Freeway No. 1 Linkou interchange southbound

In order to improve the traffic queue in southbound A exit of Linkou Interchange, the Bureau implement several measures in 2007, including modification of channelization making and adjustment of three lanes with arrow making. After implementation, the situation of traffic queue has been mitigated.



## 6) Traffic Projects

### (1) User friendly highway guide signs amending project sequel

“User friendly highway guide signs amending project” was completed in its first stage in January 2007. In order to gain more benefits we followed the advice from the Institute of Transportation (IOT) to process further events.

All the further events have completed by the end of June, 2008:



Event	Cost (1000 NTD)	Volume Changed	Completed Sample
<p>1. Review the guide signs on National Freeway No. 1 and 3 connecting to the East-west expressways, especially in system interchanges. The work content is to follow amendments of the Institution on Establishing Traffic facilities to replace the provincial highways route signs to white words and red background.</p>	476	275	
<p>2. Verify National Freeway entrance and exit signs (including destination, direction and other information), and coordinate with the road maintenance related units.</p>	787	28	
<p>3. Pictorial sign amendments to “turn on headlight”, “maintain following distance”, and “Escape ramp” signs.</p>	350	99	
<p>4. Second stage review of pictorial sign locations.</p>	446	4	



## (2) Toll stations traffic engineering improvement

Standardizing all traffic signal around the toll stations. We conducted the standardization of obstacle aheads and set up signs in front of the toll station divider to uniform the facilities and to enforce the safety. The event has been completed by June 2008.



## (3) Enforce wrong direction warning

In order to prevent vehicles entering the freeway in the wrong direction resulting in traffic accidents. The following events have been completed by March 2008.

- Verifying freeway exit related prohibitory signs and makings.
- The reflective markers set on the freeway exit ramp should now be stucked on red color warnings in the back.
- All interchange between the freeway exit ramp and connecting road should be plot on the direction markings. These are shown in the samples below:



- Set the “exit ramp, do not enter” LED sign on the exit ramp.





**(4) Warning signs in front of the tunnel entrances**

There are multiple signs encountered in front of tunnel entrances, including tunnel name, tunnel guide and information signs, height limit, no lane change within tunnels, turn on headlight and no u-turn signs. To simplify the signs and enforce traffic warning effect, we have set “Warning 41” tunnel sign and “Warning 23” signal ahead sign on the same backbone, with the tunnel sign on the top and the signal ahead sign on the bottom. This sign will be on the right hand side of the road and auxiliary signs will not be placed in the position.



**(5) The improve of traffic signs, makings and signals in service area**

- a. Disabled parking signs, marking and words.

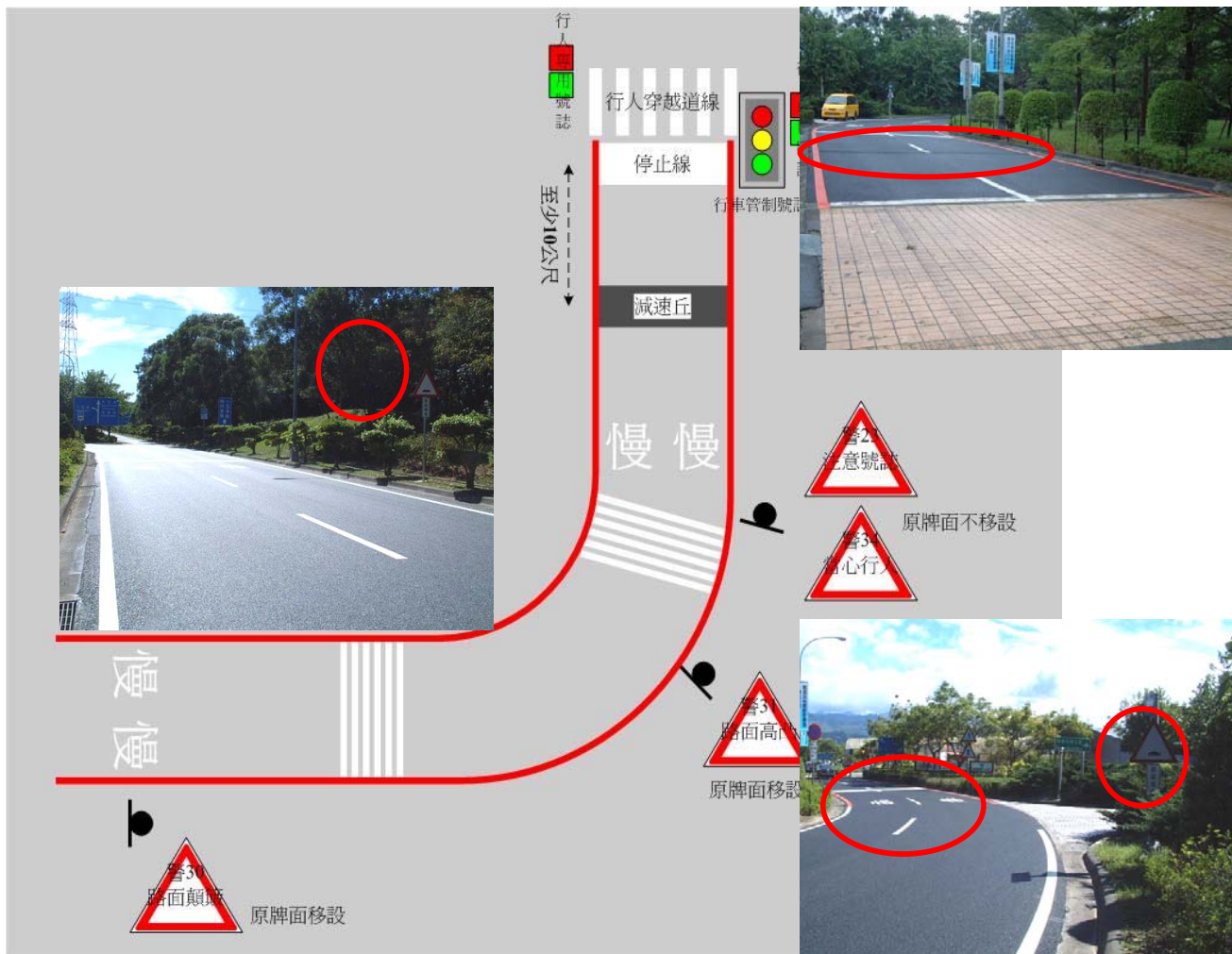
To match up the modification in “Codes of design on accessibility of building”, the Bureau (TANFB) will standardize the disabled parking facilities conformed with “Regulation for installing traffic signs, making and signals” in service area.





## b. Guansi Service area

The entrance of Guansi service area is crossed the gangway between toilet and service building. It raises the impact between pedestrian and vehicle. New signs and markings are redone with the resurfacing works conducted at service area entrances to intensify the warning and safety.



Guansi service area entrance signs and markings improvements

## 7) Regulations amendments.

### (1) Traffic engineering handbook amendments

The “traffic engineering handbook” was promulgated by the MOT on January 16<sup>th</sup>, 2004. In order to meet operations requirement, the handbook was amended after 2 meetings with the MOT and released the amendments on November 28<sup>th</sup>, 2008.

Key amended section includes: Freeway, highway beginning and end sign, the incorporation of Series E(M) 2000 font, laws regarding of lane use control light used on road shoulders, long tunnel (above 4 km) construction samples, construction control and the opening of buffer zone.



## **(2) Amendments to “Fundamental Principles of Temporary Traffic Control”**

The Fundamental Principles of Temporary Traffic Control were amended in November 2007. To make the rules more complete, that were further amended in 2008. The latest edition includes: the regulation of signal vehicles, road shoulder opening due to construction on inner lane, explanation of warning arrow sign, movable LED warning sign and water filled barrier usage.

## **(3) Revision of partial articles of “Freeway and Expressway Traffic Regulations”**

After reviewing the current “Freeway and Expressway Traffic Regulations”, we found that amendment of partial articles will be helpful for traffic management. In addition, the Hsuehshan Tunnel speed limit adjustment requires further revision to the regulation. Key revisions are outlined below have been approved by the Legal Affairs Committee of MOTC and currently in processing:

- a. By the experience of dealing with traffic accidents, the polices often find accidents caused by the car hitting fallen of vehicle parts.  
In current regulations, there isn't any rules to regulate the situation of falling off vehicle parts, so we amended the 14<sup>th</sup> article of the Regulations.
- b. The initial speed limit (June 16<sup>th</sup>, 2006) for the Hsuehshan Tunnel was 70 km/hr. According to the 16<sup>th</sup> article vehicles travelling in tunnels over 4km need to keep a minimum distance of 50 meters. When the Hsuehshan Tunnel was opened to Buses in November 15<sup>th</sup>, 2007 and had adjusted the speed limit to 80km/hr since March, 16<sup>th</sup>, 2008, the “50 meters” rule made large vehicles in long tunnels under a lower standard compared to regular highway. So we amended the 16<sup>th</sup> article of the Regulations.



## **8) Traffic Management System on the Freeway and Expressway (Intelligent Transportation System, ITS).**

**(1) The ITS is a growing trend in the globe, it is an incorporation of real-time information system for the road users. This system can effectively integrate information, telecommunication and electronic, technology control systems and management into a transportation system. To make ITS available for the Freeways and Expressways, a connection among the traffic control networks of various regions needs to be combined to provide an efficient and non-congested travelling service. Therefore it is an important part of the public transport improvements.**

**(2) Freeway and Expressway systems in Taiwan have been divided into Northern, Central, Southern and Pingling control centre, each one has the following goals:**

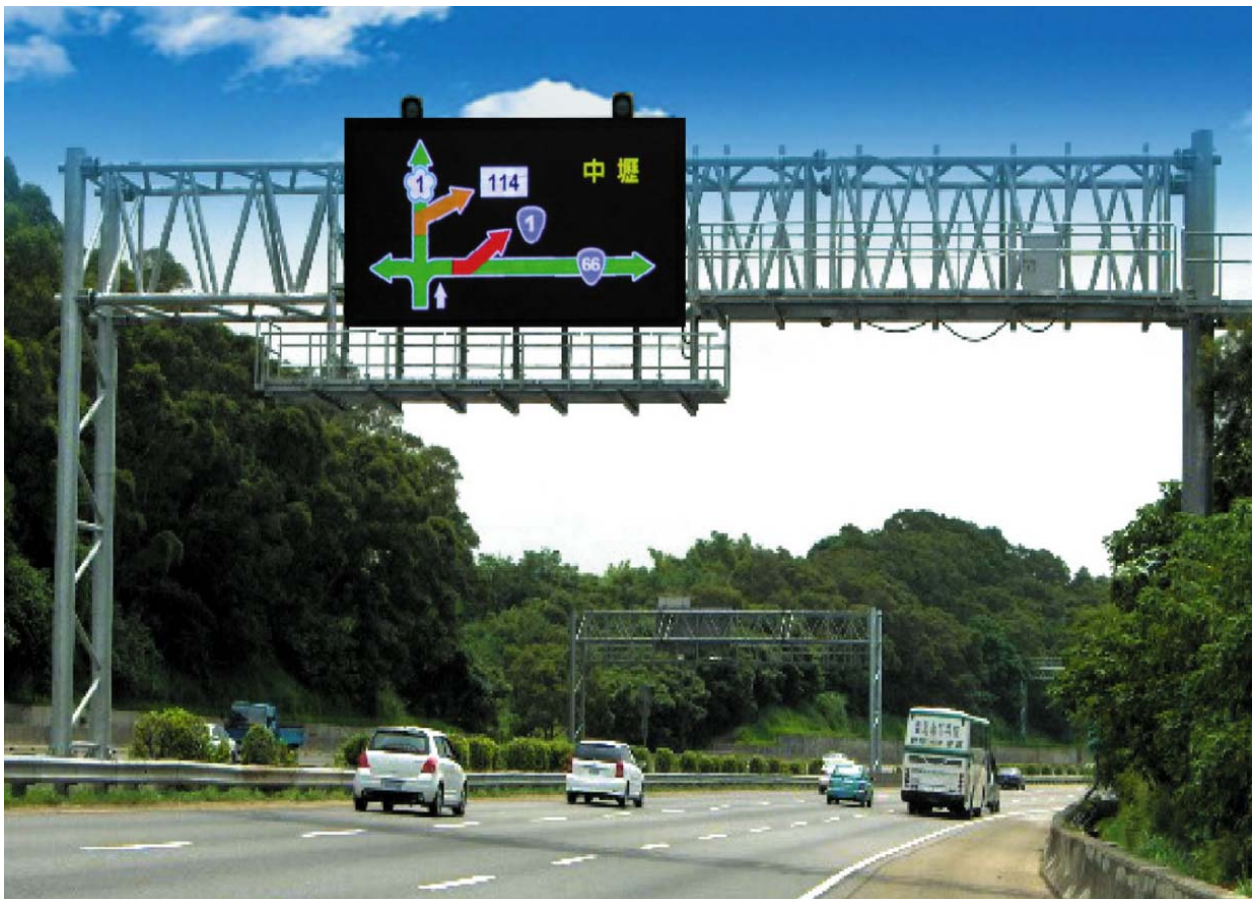
- a. Collecting traffic data, monitoring traffic conditions and handling current road conditions.
- b. Combining current traffic conditions and various traffic control strategies to reduce travel time and improve safety for the road users.
- c. Providing up to date traffic conditions for the road users to be aware of what is coming up ahead and make the correct decisions.

The systems are then integrated in the northern traffic information control monitoring centre TIMCCC (Traffic Information Management Coordination and Command Center) so that it can organize various regions and coordinate traffic management of freeways/expressways nationwide with the concept “concentrated information, regional management”.

**(3) To improve traffic management in Hsuehshan and other tunnels, Muzha control station was incorporated to Pingling control centre, which will unify and improve the service provided.**



Travel time information



Traffic route information



## 9) Others

### (1) Freeway Lane Adjustments Operations

To improve traffic order of the sections near urban and interchange areas, the Bureau began multiple lane adjustments from 2007. These include Yuanshan-Sanchong section, Dingjin system – Wujia system interchange sections of freeway No. 1. These sections held trial measure to allow large vehicles to travel on the inner lanes. Auxiliary lanes are added on the southbound of Wudu-Sijhih toll station sections of the Freeway No. 1, in addition vehicles carried hazardous goods travelling through interchange sections can use inner lanes to surpass other vehicles.

All initiatives and trials have shown positive results and have been implemented normally this year.

In addition, we asked region engineering offices to review the need of lane use adjustment for other sections, then implemented as below:

- a. National Freeway No. 1 Changhua system to Chunghua interchange southbound sections: There is 1 lane more than upstream and downstream sections, and it results in large vehicles have to change lane multiple times. After reviewing, we adjusted the outer lane to a auxiliary lane. The northbound section will also be reviewed if an auxiliary lane adjustment is necessary.
- b. National Freeway No. 1 Taishan- Wugu section: In this section, it can be separated to “Taishan- Sijhih Wugu Viaduct” section with 4 lanes, “Sijhih Wugu – Viaduct Wugu” section with 3 lanes and “Wugu-Sanchong” Section with 4 lanes. The large vehicles have to change lanes twice in this section due to a regulation rules the large vehicle must run on outer lane. On the other hand, the regulation that heavy trucks without changing lane in time could violate the regulation by mistake. So we extended the crossing dot line at the place of main line diverging to Sijhih Wugu Viaduct to the place of Wugu Interchang diverging to main line. After the crossing dot line being extended, the outer lane was changed for exit use and not belong to main line, it means there are 3 lanes only, then the large vehicles can run on outer lane of 3 lanes and use the middle lane to surpass.



c. National Freeway No.3 "Keelung Tunnel" northbound exit section: After exiting tunnel, this 3 lanes section directly connects to the exit lane. It makes small cars those change lanes to exit freeway conflict with large vehicles. So we re-marked the line of outer lane to a crossing dot line and extended to exit of tunnel. Then the outer lane changed for exit use and the main line changed to 2 lanes only, the large vehicles that exit tunnel can run on outer lane of 2 lanes and use inner lane to surpass. In tunnel, the outer lane is an auxiliary lane, but still mark a double solid lines to prohibit surpass. The large vehicles can run on outer lane of main line.

**(2) Examining the feasibility of opening Hsuehshan Tunnel for heavy trucks.**

Response to the opening of the Hsuehshan Tunnel, the Ministry of Transportation and Communication had grouped "Inspection and Coordination Team for Long Highway Tunnel Opening" to actively advance various disaster preventing works. After few foreign fire incidents in long tunnels, the team had advised only opening the tunnel to small vehicles initially until road users are familiar with the road conditions. This is followed by a second stage where buses are allowed to travel the tunnel. However there has been no plan for opening the tunnel to heavy trucks. The Research, Development and Evaluation Committee of Executive Yuan has requested the Bureau to evaluate the feasibility of allowing large vehicles to travel the tunnel in offpeak period. Our findings were the tunnel was designed with all vehicles originally, and currently the tunnel had opened for buses. However, due to safety concerns, heavy trucks incidents are more hazardous and will be difficult to respond to. Due to the capacity limitation of the Hsuehshan Tunnel, the traffic congestion will be severe. Fire departments of both sides of the tunnel question their response ability to an incident, and alternative routes, Provincial highway No. 2 and 9, have been improved. Therefore it is the opinion of this Bureau that the Hsuehshan Tunnel should not be opened to heavy trucks.



### (3) Examining the feasibility of all trucks running on freeway with the closed carriage to carry cargos.

Except container trailers and vans, current trucks are commonly using open carriage. Although current regulation is strict in the binding requirements for cargo, often it is difficult to reinforce due to driver negligence or type of cargos held in the transport. The high speed of freeways may cause vibrations for objects to fall out of the carriage and cause harm to others. With numerous recent cases from fallen objects ahead, the drivers are not only responsible for the damages caused to others, they may also be liable for punishment. It is the reason for the public to suggest closed carriage regulation modification for transport as a solution.

The Bureau assessed the feasibility of making all trucks use closed carriage to carry cargos and sought advices from various departments, the conclusion is the plan must currently be held back due to the number of open carriages and taking into account of the vehicle owners rights, may not be feasible in the current situation due to the cost for modifications.

### (4) Traffic safety note in construction sections promotions

To reinforce promotion of traffic safety note and remind the drivers to be alert when passing through the working zone. We have printed 100,000 of "Traffic safety note in construction sections" booklets. In service areas, Directorate General of Highways Motor Vehicles Supervision Stations and Taipei and Kaohsiung Motor Vehicles Supervision Office, the promotion could be taken freely.







### (5) Traffic Safety Promotions

#### a. “Transported goods should be tied up securely” promotion

Recent incidents caused by fallen objects have caused damages, injuries and death. To ensure freeway traffic safety and order, the Bureau has conducted a “Transported goods should be tied up securely” promotion to remind the public to regularly maintain their vehicle and check for cargos to be buddled and covered to prevent good falling, leaking or spraying onto oncoming traffic. To avoid endangering others and traffic order.

Since June to July in 2008, various promotions were completed by the end of July. News announcements, radio broadcasting, short films, banners, posters, road lamp flags, CMS, bill boards and even stickers are used to promote the message to the public.



“Transported goods should be tied up securely” promotion A4 stickers and posters.



“Transported goods should be tied up securely” promotional short films.



“Transported goods should be tied up securely” promotion banners.



“Transported goods should be tied up securely” promotion road lamp flags.



“Transported goods should be tied up securely” large promotional billboards.



- b. The results of advertising lamp boxes and boards at the bus stop of the Bureau entrance

Outside the Bureau office entrance is the bus stop for both Northbound and southbound buses. These stops have waiting booths with lamp boxes and boards for advertising. The Bureau has hired professionals to design and produce promotional posters and the posters are setup by mid November. The posters incorporate the Bureau's name, logo and beautiful pictures of the freeway as design elements to promote the Bureau. In addition, "Transported goods should be tied up securely" promotion posters are also displayed to remind the public and prevent incidents.

To spread the improvement to the bus booth to other places, other sites of the Bureau are also joining the activities.



Northbound displays



Southbound displays



c. Service area promotion

(a) Promotional facilities in service areas

This year the Bureau continues to review and improve traffic safety promotions in service area. To enhance the facility function and content in quality and efficiency. These include:

- Newer large sized promotional billboards.
- The making of lively promotional posters and stickers
- The making of a variety of booklets.
- Setup tourism guide maps.
- Guansi service area “Freeway information Kiosk” has a new traffic information television wall.



Promotional posters and stickers



Local Tourism maps guide.



“Freeway Information Kiosk” traffic information television wall.



### (b) Freeway Information Kiosk

To raise freeway safety awareness, each service area has a freeway information kiosk which follows 5 key idea, that of See, Listen, Find, Collect, and Ask. To provide users with better freeway information, currently there are 6 service areas to setup such kiosks. They are Guansi in the North, Siluo, Nantou and Cingshuei in the centre, Gukeng and Dongshan in the south. Nantou and Cingshuei kiosk was established this year and the Bureau will build more such service in other service areas.

Other than the Guansi Kiosk, which was renewed from an older traffic safety promotion area, other information kiosks are new and are designed to provide a complete information service to the public. In the future, we hope to increase the number of services and our service quality to increase the effect of our promotions.



Siluo service area Freeway information kiosk



Nantou service area Freeway information kiosk



Cingshuei service area Freeway information kiosk

**(6) The Executive Yuan awards the Bureau for “2007 Road traffic order and safety improvement proposal”.**

The Ministry of Transportation and Communication inspected highway and freeway works from May 12-13 and 15<sup>th</sup> in 2008. They are accompanied by Vice Chief Engineer Lian with Construction, Toll and Service, Traffic Management Division and Widening Construction Office teams to answer and outline the works we did.

The results show the Bureau coming second place, in which transport construction, general, management examination and accident prevention have come first place in their category. Safety promotion has come second and the bureau was recognized in an award ceremony for the “2008 Traffic Safety Golden Award” as second place.

**(7) Conducting the “2008 Traffic Safety Golden Award” ceremony**

The Traffic Safety Golden Award ceremony is a major event in the traffic industry, its key purpose is to award excellence professional drivers and the groups and persons whom have contributed exceptionally to the traffic safety. The award is a chance to appreciate their hard work.

The 2008 award ceremony was conducted on December 2<sup>nd</sup> (Tuesday) at the Ministry of transportation and Communication international convention hall. The Bureau was honored to be nominated as the coordinator of this ceremony.



This year's award includes: Excellent Performance in "Road traffic order and safety improvement proposal", excellence in traffic safety activities award, traffic safety education inspection, excellent professional driver award, traffic guidance teachers and volunteers, volunteer traffic policemen, excellent traffic police awards. In total, there are 196 group and personal awards. In addition a special contribution award was given to Mr. Ren-Cheng Tu.

The Bureau has received second place award of team one, category award in transportation construction, safety promotion, incident prevention and general and management examination awards. Our results are outstanding.

