



# 7 Toll Collection

## 1 Toll Collection Conditions

There are 11 toll stations on both National Freeway No. 1 and National Freeway No. 3 and 1 toll station on National Freeway No. 5. Each toll station uses barrier type toll collection and a uniform rate of NTD40 for small vehicles, NTD50 for bus and trucks, and NTD65 for tractor trailers. In 2012, a total of 573,511,887 vehicles passed through the toll stations, representing an annual growth rate of roughly 0.40%. Of this, the number of small vehicles increased 0.68%, bus and trucks decreased 0.01%, while tractor trailers decreased 2.46%. Toll revenue for the full-year totaled NTD21,620,390,569, a decrease of 4.34%.

To encourage road users to use toll coupons, we will continue to promote the use of small vehicle toll coupon lanes, which do not accept cash. Toll coupons are sold at the freeway service areas and toll stations as well as post offices and gas stations.

**2011 and 2012 Tolls Comparison Table**

	Small Vehicle	Bus and Truck	Tractor Trailer	Total(Vehicle)	Toll (NT\$)
2011	479,549,205	52,564,731	39,114,848	571,228,784	22,601,664,593
2012	482,796,538	52,561,510	38,153,839	573,511,887	21,620,390,569
Growth Rate	0.68	-0.01	-2.46	0.40	-4.34

**2012 FY Traffic Table by Vehicle Type**

	Electronic Toll Collection	Manual Toll Collection			Total (Vehicle)
	ETC Traffic	Toll Coupon	Cash	Other	
Small Vehicle	227,328,983	185,534,199	62,764,221	7,169,135	482,796,538
Percentage	47.09	38.43	13.00	1.48	100.00
Bus and Truck	41,550,091	7,954,623	2,153,376	903,420	52,561,510
Percentage	79.05	15.13	4.10	1.72	100.00
Tractor Trailer	35,264,405	2,233,428	237,278	418,728	38,153,839
Percentage	92.43	5.85	0.62	1.10	100.00
Total	304,143,479	195,722,250	65,154,875	8,491,283	573,511,887
Percentage	53.03	34.13	11.36	1.48	100.00

Note: The Other items under manual toll collection include temporary suspension of toll collection, official and military traffic.

Toll collections were temporarily suspended in order to alleviate traffic congestion during consecutive holidays, major folk festivals, and typhoons. Shortfall of toll revenue for 2012 full year due to temporary suspension of toll collection totaled NTD 340,870,430.

**2012 FY Toll Revenue Shortfall from Toll Collection Suspension Table**

	Traffic (Vehicle)	Toll (NT\$)
Spring Festival	3,391,423	139,008,240
Peace Memorial Day	923,756	38,945,055
Extremely Heavy Rain	421,964	18,002,005
Typhoon Talim	420,328	18,332,480
Typhoon Saola	609,170	25,960,915
Typhoon Tembin	361,247	15,584,250
Toll collection at Yuemei Toll Station is temporarily suspended due to the collapse of the Houfeng Bridge	1,267,841	56,703,500
Total	8,065,413	340,870,430

In order to shorten the time of vehicles passing through the toll stations, on February 10, 2006 at 2 p.m., the times-based phase of electronic toll collection (ETC) operations began. One ETC lane was opened for small vehicles and for large vehicles at each northbound and southbound of toll stations. As the volume of ETC traffic increased at each toll station and reached the requirement for opening additional ETC lanes, the second and third lanes for small vehicles of the Taishan Toll Station was opened on April 15, 2008 at 12 a.m. and on May 6, 2010 at 12 a.m., respectively. The second ETC lane for small vehicles of the Shulin Toll Station was opened on January 6, 2009 at 0:00, and of the second lane for small vehicles the Toucheng Toll Station was opened on July 30, 2008.

Starting on July 18, 2012, the ETC lane was opened at 3 additional toll stations, the Xiahi, Yangmei, and Longtan Toll Stations. On August 30, 2012, 2 small vehicle ETC lanes at 11 toll stations was opened (3 at the Shulin toll station), including Zaoqiao, Houli, Yuanlin, Dounan, Xinying, Xinshi, Gangshan, Shulin, Houlong, Dajia, and Mingjian. On December 16, 2012, with the opening of the Wu-Yang Viaduct, an additional ETC lane for small vehicles was opened in the southbound direction at the Yangmei Toll Station. On December 20, 2012, 4 small vehicle ETC lanes was opened at the Taishan Toll Station.



Place new speed limit 50 km/hr markers



Additional notice signs of opening hours placed before the vehicle lanes



Individual ETC lane speed limit markings (words)



Vehicle lane notice signs placed before the toll stations



4 additional dual carriageway small vehicle ETC lanes will be available at the Taishan Toll Station



With the opening of the Wu-Yang Viaduct, an additional ETC lane for small vehicles will be opened at the Yangmei Toll Station



## 2 Implementation of Free Passage Measures for Passenger Buses on the National Freeways

To support the implementation of the "Promoting Public Transportation Development Program," since February 1, 1997, the Bureau has announced and implemented free passage measures for passenger buses traveling on the national freeways. As of 2012 year end, 36 bus companies and 205 routes have been approved. About 11,450 thousand vehicles passed through the toll stations during 2012, resulting in a shortfall of toll revenue estimated at NTD570 million.

## 3 Private Sector Participation in Highway Electronic Toll Collection System Construction and Operation Program

- (1) The Bureau has carried out the "Private Sector Participation in Highway Electronic Toll Collection System Construction and Operation" program. As of 2012 year-end, the number of ETC system users has reached over 3 million. Far Eastern Electronic Toll Collection Co., Ltd. (FETC) has cooperated with more than ten thousand channels nationwide, providing high quality service for road users to install the eTag device, add value, and make payments on balance due. Since the end of August 2008, the Company's corporate website began to provide consumers with online bill payment service. Users can take advantage of this online self-service function to complete their payments. From November 2008, FETC has added "Online Balance Due Inquiry" and "Online Credit Card Payment" services onto their home page, so that consumers can inquire and make payments with just one click of a button. It is expected that there will be a lot more users using the online payment function in the future, allowing them to complete convenient ETC services at home.
- (2) FETC has provided a total solution to provide free eTag installation for all road users on June 29, 2011. The amount paid for the OBU can be refunded at the original purchase price and converted into stored value for the tolls. After assessment, the total solution proposed by FETC are feasible and



beneficial to the public, and should be able to help raise the utilization rate. Moreover, the proposed solutions have clear implementation steps and time table, and can link up with the distance-based toll collection system. Hence, Our Bureau approved the proposed solution. Going forward, our bureau will also come out with related supporting measures to increase ETC installation and utilization by promoting it through multiple channels. Hopefully, full conversion to distance-based ETC on all our freeways will be successful in 2013.

- (3) Since free eTag installation implemented on May 15, 2012, there are already 2,340 thousand eTag users as the yearend. Together with the original electronic toll collection users (OBU), the total number of users has exceeded 3,130 thousand. The highest single-day utilization rate has increased to about 70% while the weekly utilization rate has exceeded 65%. Through the free eTag installation solution, the ETC utilization rate and the number installed is expected to effectively improve and continue to grow.
- (4) In order to attract passengers to use ETC, The 10% discount on toll fees at all toll stations is offered from now to the date when distance-based toll collection is implemented for all ETC users with either OBU or eTag.
- (5) In view of FETC's free eTag installation program, there is no limit for road users no more have ETC usage. Going forward, the Bureau will strictly supervise the related distance-based set up operations so that distance-based ETC can be implemented according to schedule.

2012 Types of Vehicles Passing Through the ETC Lanes Table

Item/ Station	Traffic (Vehicle)				
	Small Vehicle	Bus and Truck	Tractor Trailer	Total	Annual Average Daily Traffic (AADT)
Xizhi	6,861,319	916,468	848,396	8,626,183	23,569
Taishan	41,655,946	5,042,058	1,905,564	48,603,568	132,797
Yangmei	16,825,171	3,720,252	2,157,326	22,702,749	62,029
Zaoqiao	10,903,272	3,428,139	1,388,040	15,719,451	42,949
Houli	11,135,081	3,340,431	1,352,430	15,827,942	43,246
Yuanlin	10,697,556	3,409,585	3,222,122	17,329,263	47,348
Dounan	8,414,934	3,011,844	3,372,396	14,799,174	40,435
Xinying	8,180,756	2,758,283	3,270,708	14,209,747	38,824
Xinshi	9,320,288	2,623,081	3,544,723	15,488,092	42,317
Gangshan	13,129,447	2,080,924	4,205,549	19,415,920	53,049
Qidu	3,162,463	137,960	452,320	3,752,743	10,253
Shulin	25,320,579	2,522,783	1,434,036	29,277,398	79,993
Longtan	12,561,457	1,502,836	1,182,750	15,247,043	41,659
Houlong	7,816,563	1,176,876	1,986,794	10,980,233	30,001
Dajia	7,799,508	1,212,871	2,001,736	11,014,115	30,093
Mingjian	6,284,473	789,382	344,946	7,418,801	20,270
Gukeng	4,111,953	628,234	260,692	5,000,879	13,664
Baihe	3,974,977	665,420	347,373	4,987,770	13,628
Shanhua	4,431,700	717,479	615,692	5,764,871	15,751
Tianliao	4,443,877	908,260	1,171,550	6,523,687	17,824
Yuemei	0	0	0	-	-
Zhutian	1,859,405	296,473	199,078	2,354,956	6,434
Toucheng	8,438,258	660,452	184	9,098,894	24,860
Total	227,328,983	41,550,091	35,264,405	304,143,479	830,993

Note: Toll collection at the Yuemei Toll Station was temporarily suspended from 12:00 a.m., September 15, 2008, due to the collapse of the Houfeng Bridge.

**2012 Types of Vehicles Passing Through the Toll Stations Table**

Item/ Station	Traffic (Vehicle)				Annual Average Daily Traffic (AADT)
	Small Vehicle	Bus and Truck	Tractor Trailer	Total	
Xizhi	13,539,372	1,111,688	970,318	15,621,378	42,681
Taishan	74,760,435	6,199,139	2,114,623	83,074,197	226,979
Yangmei	34,481,388	4,557,386	2,336,219	41,374,993	113,046
Zaoqiao	23,563,780	4,144,185	1,523,689	29,231,654	79,868
Houli	24,956,052	4,116,314	1,508,324	30,580,690	83,554
Yuanlin	24,812,739	4,343,852	3,479,553	32,636,144	89,170
Dounan	18,120,630	3,663,046	3,596,276	25,379,952	69,344
Xinying	17,337,527	3,386,983	3,461,019	24,185,529	66,081
Xinshi	20,653,545	3,231,519	3,749,124	27,634,188	75,503
Gangshan	30,279,732	2,817,583	4,557,742	37,655,057	102,883
Qidu	6,048,213	188,305	483,891	6,720,409	18,362
Shulin	53,251,556	3,490,357	1,593,625	58,335,538	159,387
Longtan	26,495,035	1,967,165	1,283,087	29,745,287	81,271
Houlong	16,465,928	1,507,177	2,105,198	20,078,303	54,859
Dajia	17,148,341	1,642,926	2,136,037	20,927,304	57,178
Mingjian	16,271,884	1,033,783	385,966	17,691,633	48,338
Gukeng	9,898,936	794,225	277,320	10,970,481	29,974
Baihe	9,439,511	837,254	367,290	10,644,055	29,082
Shanhua	10,463,241	921,747	639,092	12,024,080	32,853
Tianliao	11,119,654	1,205,955	1,227,420	13,553,029	37,030
Yuemei	869,192	265,091	133,558	1,267,841	3,464
Zhutian	5,344,119	421,163	223,285	5,988,567	16,362
Toucheng	17,475,728	714,667	1,183	18,191,578	49,704
Total	482,796,538	52,561,510	38,153,839	573,511,887	1,566,972

Note: Traffic includes manual collection and ETC lanes.

## 4 ETC Promotion

In order to promote the ETC, from January to March and September to December 2012, the Bureau has commissioned the Police Radio Station (PRS) to produce and broadcast related promotions, display key promotion points when eTag begins operations, and arrange managers at all levels to accept radio host interviews and promote the ETC business.



During the year, Our Bureau participate in 3 activities held by the Police Radio Station's (PRS) Taipei station, Taichung station, and Kaohsiung station. Carnival booths have been set up to promote the ETC business. On July 31, the PRS Taipei station held a "PRS Summer Marching" activity. The Station has invited Our Bureau to participate and strongly promote eTag during the program. Temporary booths have been set up in front of the Station so that the Far Eastern Electronic Toll Collection Company (FETC) can install eTag onsite for listeners. On the activity of the PRS Taichung station, the Our Bureau has also been invited to participate and promote traffic safety and ETC to the public. eTag installation service has been provided and the Station has also arranged for Bureau officers to go on air for an interview and promote eTag. On July 5, the PRS Kaohsiung station held a Police Day Carnival at the Kaohsiung City Wei-Wu-Ying Center for the Arts to celebrate Police Day. Our Bureau hung posters and promotion material and prepare a variety of promotion prizes to help increase the publics' sense of participation as well as allow the public to get a better understanding about traffic safety and ETC policy through prize-giveaway quiz games.

In addition, on December 6 and 7, 2012, we participate in the Chinese Institute of Transportation's 2012 Annual Meeting held at the National Cheng Kung University. Booths have been set up at the venue to promote ETC benefits and highway intelligence, and the Minister has already visit the booths.



Minister visits each booth at the Chinese Institute of Transportation's 2012 Annual Meeting



Participate in the PRS Taipei station's promotion activities



Participate in the PRS Taichung station's promotion activities



Participate in the PRS Kaohsiung station's promotion activities