



Tech Memo

DATE: January 9, 1998.	PROJECT: Estudio Integral de Transporte (II) / Juarez Data Analysis and Model Development (TTISL#40733)
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SUBJ: Progress under Task 1: Editing/analysis of the on-board transit count database.	

Overview

Information from the 1996 Juarez travel survey has been stored in four main databases:

1. On-board transit count
2. Household survey
3. Workplace/special generator survey
4. External station survey

The present Tech Memo summarizes the procedures developed for data editing and preliminary analysis of the on-board transit count database.

Background

As in the case of other major Mexican cities, transit is a very important mode of travel in Juarez. Despite its overall poor state, it is estimated that over 60% of the population use it, and currently accounts for at least one fourth of all daily person-trips in the city. Thus, no transportation model for this city could be complete without including this mode.

At the present time, transit service in Juarez is provided in two ways: 1) Normal route, and 2) Special trips (viajes especiales). Normal route transit in Juarez consists of school type buses operating mixed in traffic under 145 fixed routes, but without fixed schedules. Officially, there are about 1,700 buses in service, which are operated by 26 private bus companies. Special trip transit also use school type buses owned by the same 26 private bus companies, but operates as a non-stop express service (one origin, one destiny), contracted for private use by major employers (usually maquiladoras). It is estimated that less than 5% of daily person trips are done through special trips. The on-board transit count concentrated exclusively on normal route service.

From October 1996 to March 1997, a number of buses on each route were sampled by field personnel during a minimum of two weekdays to obtain relevant demand and operation data. Each bus was sampled for at least an entire half of its route cycle (inbound or outbound). At the end, close to 3,100 samples were obtained in this period, that is, over 20 buses per route on average (approximately 10% of the buses operating per day, for each route), generating close to 100,000 records.

This information was then entered into an electronic database, known as the on-board transit count database. Work has now been done to verify and clean the stored information.

In order to expand the sample and obtain the total daily passenger demand, other teams counted the number of times that buses covered each route per day. Thus, the total passengers/route/day could be estimated by multiplying the average passengers/bus/route times the number of buses/day.

Database design

Since this was the first database from the 1996 travel survey that the IMIP team needed to handle, it was imperative to do it under a familiar environment: for the IMIP team this meant using MS-Excel spreadsheets, and programming any data check procedure or macro using Visual Basic codes.

Simultaneously, there would be some experimenting with MS-Access and its powerful query builder capabilities.

The On-board transit count database is composed of a principal table (CAB_) and a details table (DET_). To work with manageable table sizes in MS-Excel, a database was created for each of the bus companies, thus a tag was added at the end of the name of each table implying its bus company source (i.e. CAB_1A and DET_1A for bus company 1A).

A general layout of the database and its component tables and fields is shown in Figure 1. A description of each of the fields is given in Appendix A. The two component tables are related by the common field CVE_AFORO (sample unique code).



Figure 1. On-board transit count database layout (example from 1A bus company).

Edit checks

Six different macros (Visual Basic subroutines) were programmed to aggregate information from the on-board transit count database, as well as to identify logical or numerical errors or inconsistencies. Table 1 provides a description of these macros.

Table 1. Macros developed for error checking and to generate summary reports.

Serial	VB subroutine	Description
TS-01	Sub zubMilits()	Converts times of every start and stop the bus makes for boarding/deboarding from hh:mm:ss to seconds. Adds a new field to both tables to incorporate the respective value.
TS-02	Sub Busquer()	Computes times between stops. Through cell coloring, identifies negative times (red), times of more than 5 (green), and 10 (blue) minutes. Computes time between a stop and respective start. Identifies negative times (purple). Identifies illogic sequence in the stop numbering (red). Identifies cells with missing data for boarding/deboarding (yellow). Provides summary of colored cells.
TS-03	Sub CerosSalidas()	Identifies with yellow color, last stops with a starting time (all last stops should have a start time of zero). Provides summary of colored cells.
TS-04	Sub buscDET()	Computes number of passengers and occupancy rate between stops.
TS-05	Sub verifLuis()	Computes time between the initial start from the base terminal and the first stop in the half route cycle. Identifies negative times (red), times of more than 10 (green), and 20 (blue) minutes. Provides summary of colored cells.
TS-06	Sub verifTAB()	For each direction on every route, computes summary stats (average, n, std dev, max, min) for passenger demand, occupancy rate between stops, stops/route/direction, and time/stop. An additional VB code for MS-Access computes summary stats for cycle travel time.

Using these macros, the errors and inconsistencies detected were corrected, and summary statistics reports were generated for each route, and for each bus company. In most instances, the errors were originated at the time of the electronic data entry (input typos) where the system did not have validation rule from its design. Only a considerably small portion of the errors detected were inconsistencies registered in the field (found in 20 of the 3,000+ sample forms). Whenever the information could not be verified, the sample was eliminated from the database.

Transit demand and performance summary

From the summary stats directly computed by the macros, the following fields were generated to establish daily passenger demand, and as indicators of the operating performance of the different routes:

N	Number of buses sampled for a given half route cycle.
bus/day	Average number of times that the route was traveled (covered) by a bus.
pax/bus	Average number of passengers that boarded the bus in a half route cycle.
pax/day	Average number of passengers per day using a specific half route ($[\text{pax}/\text{bus}] \times [\text{bus}/\text{day}]$).
paxd/kmr	Average number of passengers per kilometer traveled ($[\text{pax}/\text{day}] / [\text{half cycle distance}] \times [\text{bus}/\text{day}]$).
occup rate	Average occupancy rate between stops (passengers on-board / number of seats in the bus).
stops[@mts]	Average distance between stops (in Juarez, bus-stop signs are not observed by most bus drivers).
stop time	Average time the bus stays at a stop (for boarding/deboarding and/or rest).
travel time	Average time the bus takes to complete a half route cycle.
travel speed	Average speed of the bus ($[\text{travel time}] / [\text{distance}]$).
cruise rate	Percentage of time in the half route cycle that bus is in motion or not.

The complete demand and performance summary is shown in Appendix B. These results will be used to eventually develop, calibrate, and verify any transit mode demand model for Juarez.

Concluding remarks

The data gathered in the on-board transit count was basically passenger movement and timing at every bus stop for boarding/deboarding, thus checks focused on logic time sequence of the routes and reasonable travel and waiting times. The number of checks generated for this database although small in appearance, is the basic requirement of such a simple data structure. The described checks cover all the needs in data accuracy for a reliable passenger demand and operation performance analysis. Geocoding of bus stop locations was the only field left unchecked at this time due to priority and time constraints. In addition it was considered that errors in bus stop geocoding would not compromise passenger demand and operation performance analysis. In any case, this check could be done in a later time when other analyses are required.

Regarding the overall analysis of the transit system, as expected the summary shows a high number of users, in the range of half a million passengers per day, for a city population of just over 1 million. Yet, it seems that the operation performance is in the low side. For instance, an average occupancy rate between stops of just over 0.50 (with respect to the number of seats in the bus) hints an excessive fleet size for the current passenger demand and for a transit service with no government subsidies whatsoever. This of course has more to do with politics and power struggles, than with efficiency criteria and good business practices of the bus companies. Another evidence of poor performance is the observed travel speeds. On the average these are in the order of 15 km/hr, low even for buses in mixed traffic. Lack of paved streets and high number of stops are only a couple of possible causes of this low speed. Certainly, these preliminary statistics give an insight on how important is public transportation for the people in Juarez, and thus its important role in transportation planning.

Appendix A

On-board transit count database.
Component tables and description of fields.

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Estudio Integral de Transporte para Ciudad Juarez

Component tables for the On-board transit count database

TABLE NO.	TABLE NAME	FIELD NAME	DESCRIPTION	RELATION		
1	Cab_ <i>[tag]</i> (principal table)	CVE_AFORO	Sample unique number. Primary key for relating tables.	CVE_AFORO (Det_ <i>[tag]</i>)		
		CVE_RUTA	Bus company code			
		CVE_RAMA	Route code			
		CVE_ECON	Bus serial number			
		FECHA	Date			
		PASAJEROS	Number of passengers on-board when bus leaves initial terminal			
		NO_ASIENTO	Number of seats in the bus			
		AF_HH	Time of day (hour) when bus leaves initial terminal			
		AF_MM	Time of day (minutes in the hour) when bus leaves initial terminal			
		AF_SS	Time of day (seconds in the minute) when bus leaves initial terminal			
		AF_AM	Either AM (=1) or PM (=2)			
		VUELTA	Consecutive number of sample for the specific route and direction			
		DIRECCION	Either OUTBOUND(=1) or INBOUND(=2)			
		2	Det_ <i>[tag]</i> (details table)	CVE_AFORO	Sample unique number. Primary key for relating tables.	CVE_AFORO (Cab_ <i>[tag]</i>)
				NO_PARAD	Consecutive number for bus stop (for boarding/deboarding) in the sample	
P_HH	Time of day (hour) when bus stops					
P_MM	Time of day (minutes in the hour) when bus stops					
P_SS	Time of day (seconds in the minute) when bus stops					
P_AM	Either AM (=1) or PM (=2) when the bus stops					
S_HH	Time of day (hour) when bus leaves the stop					
S_MM	Time of day (minutes in the hour) when bus leaves the stop					
S_SS	Time of day (seconds in the minute) when bus leaves the stop					
S_AM	Either AM (=1) or PM (=2) when the bus leaves the stop					
SUBEN	Number of passengers boearding at the stop					
BAJAN	Number of passengers deboearding at the stop					
OBSERVA	Notes about the stop (I.e. reasons for a delay, traffic accidents, etc)					
NUM_NODO	Geocode of the nearest intersection to the stop (intersection index)					

Appendix B

Transit demand and performance summary tables

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Summary of daily passenger demand for transit

(October 1996 to March 1997 sampling)

CODE	BUS COMPANY NAME	No. buses	% buses	Total Demand	% Demand	Tchebysheff Error		Normal Error	
						Demand min	Demand max	Demand min	Demand max
1A	1A	145	8.7%	43,377	7.7%	27,586	59,169	34,212	52,543
1B	1B	78	4.7%	31,005	5.5%	19,629	42,380	24,453	37,556
2A	2A	20	1.2%	9,451	1.7%	6,461	12,441	7,816	11,086
2B	2B	30	1.8%	15,516	2.8%	9,271	21,760	12,074	18,958
2L	2 Lázaro (operates with LJ)	40	2.4%	15,001	2.7%	8,829	21,173	11,413	18,590
3A	3A	37	2.2%	13,047	2.3%	8,421	17,673	11,908	16,484
3B	3B	81	4.8%	24,723	4.4%	11,969	37,933	17,211	32,235
4R	4	77	4.6%	23,390	4.1%	14,049	32,730	18,217	28,563
5A	5A	49	2.9%	21,554	3.8%	13,412	29,696	16,781	26,327
5B	5B	72	4.3%	20,956	3.7%	10,485	31,428	14,978	26,934
6R	6	64	3.8%	20,353	3.6%	14,077	26,629	16,795	23,911
7R	7	76	4.5%	17,129	3.0%	10,760	23,499	13,501	20,757
8A	8A	39	2.3%	8,607	1.5%	5,494	11,720	6,816	10,399
8B	8B	41	2.4%	11,596	2.1%	7,593	15,599	9,193	13,738
10	10 Autotransportes Campesinos	75	4.5%	26,780	4.7%	14,878	38,682	20,155	33,404
CE	Central	49	2.9%	16,164	2.9%	11,232	21,097	13,363	18,966
CR	Circunvalación Rojo	57	3.4%	9,332	1.7%	5,267	13,398	6,977	11,688
JA	Juárez Aeropuerto	117	7.0%	42,227	7.5%	22,895	61,558	30,452	54,001
JZ	Juárez Zaragoza	129	7.7%	39,510	7.0%	22,143	56,876	28,755	50,264
LJ	Líneas de Juárez	56	3.3%	26,599	4.7%	15,286	37,911	23,011	33,134
MA	Mercado de Abastos	36	2.1%	9,221	1.6%	6,729	11,713	7,843	10,599
OP	Oriente-Poniente	16	1.0%	14,400	2.6%	5,750	23,311	9,200	19,600
PU	Permissionarios Unidos	100	6.0%	31,133	5.5%	19,213	43,053	24,356	37,910
TN	Tierra Nueva	46	2.7%	26,218	4.6%	18,600	33,836	21,654	30,782
TU	Transportes Urbanos	96	5.7%	38,676	6.9%	24,555	52,798	30,726	46,552
VJ	Autotransportes Valle de Juárez	50	3.0%	8,157	1.4%	4,071	12,243	5,589	10,725
		1,676		564,122		338,653	790,306	437,447	695,708

40%

23%

Summary for bus company 1A

Route	dir	distance	Demand										Performance										
			N	bus/day	pax/bus	pax/day			paxd/kmr	paxd/kmr	occup rate		stops@mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
				avg	avg	avg	Min	Max	avg	2-way avg	avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	% stp	% mtn	
Morelos I, II, III	1A01	out	19.4 km	11	58.0	48.9	2,837	1,954	3,719	2.5	2.8	0.48	1.36	445	55	11.9	180	66.2	74.3	17.7	15.7	13%	87%
		in	18.7 km	10	58.0	58.5	3,393	2,372	4,414	3.1		0.58	1.69	422	59	12.3	225	66.7	75.3	16.9	14.9	14%	86%
Juárez Nuevo	1A02	out	17.1 km	10	38.5	36.8	1,417	782	2,051	2.1	2.6	0.37	1.18	501	49	13.5	118	56.0	67.1	18.6	15.3	14%	86%
		in	16.6 km	10	38.5	49.4	1,902	1,121	2,683	3.0		0.61	1.63	444	49	15.2	157	54.6	62.8	18.4	15.9	17%	83%
Lomas Alcaldes	1A03	out	21.3 km	10	50.0	52.1	2,605	1,291	3,919	2.4	2.5	0.59	1.90	463	76	12.3	94	76.3	102.8	17.1	12.4	12%	88%
		in	18.6 km	8	50.0	46.5	2,325	1,566	3,084	2.5		0.42	1.45	455	48	11.9	195	66.1	73.8	16.9	15.1	12%	88%
Lomas Tec	1A04	out	16.5 km	10	48.5	34.1	1,654	1,031	2,277	2.1	2.4	0.42	1.23	518	52	17.4	1558	64.2	92.9	15.9	10.7	14%	86%
		in	16.2 km	9	48.5	43.0	2,086	1,264	2,907	2.7		0.51	1.44	428	56	10.0	76	65.4	70.4	14.9	13.8	10%	90%
Parques Industriales	1A05	out	12.2 km	11	33.0	39.2	1,293	653	1,933	3.2	3.2	0.54	1.28	508	39	17.0	192	48.3	60.3	15.5	12.2	14%	86%
Jarudo	1A06	out	18.2 km	10	40.0	49.9	1,996	1,314	2,678	2.7	2.7	0.54	1.50	620	43	17.1	544	68.1	95.4	16.5	11.5	12%	88%
Pradera	1A08	out	14.3 km	13	34.5	38.8	1,340	905	1,775	2.7	2.7	0.43	1.89	602	34	19.8	907	53.6	64.8	16.2	13.3	15%	85%
Pie de casa-Lucio Blanco	1A09	out	17.1 km	10	41.5	37.5	1,556	782	2,331	2.2	2.4	0.40	1.09	463	50	12.5	391	57.4	69.7	18.1	14.7	13%	87%
		in	16.6 km	9	41.5	42.3	1,757	1,088	2,426	2.6		0.45	0.93	440	62	12.7	138	55.5	65.7	18.0	15.2	14%	86%
Morelos I y II x Eco 2000	1A10	out	20.3 km	11	55.5	61.9	3,436	2,099	4,773	3.1	3.1	0.68	1.64	423	77	12.8	109	67.3	79.1	18.3	15.4	15%	85%
		in	19.8 km	11	55.5	61.7	3,426	2,581	4,271	3.1		0.69	1.47	416	68	13.6	289	67.8	75.4	17.6	15.7	16%	84%
Torres x Hiedra	1A11	out	18.9 km	10	42.5	43.7	1,857	921	2,794	2.3	2.6	0.42	1.41	465	56	12.0	314	64.2	88.1	18.0	12.8	13%	87%
		in	18.5 km	10	42.5	55.2	2,346	1,581	3,111	3.0		0.57	1.34	423	56	13.6	154	61.4	72.4	18.2	15.3	16%	84%
Futurama x 16	1A14	in	10.9 km	19	27.5	34.5	948	724	1,172	3.2	3.2	0.42	1.04	441	36	29.1	468	51.3	59.8	12.9	11.0	23%	77%
Parques(Soriana) x JMAS	1A15	in	11.7 km	7	20.0	47.7	954	587	1,321	4.1	4.1	0.55	1.16	405	43	25.1	481	52.2	58.3	13.5	12.0	23%	77%
Machado o Parq(Soriana)	1A16	in	9.8 km	25	69.0	46.7	3,221	2,500	3,941	4.7	4.7	0.63	2.07	394	41	24.2	671	43.3	54.5	13.9	10.8	23%	77%
Jarudo x JMAS	1A17	out	15.5 km	5	8.5	44.0	374	147	601	2.8	2.8	0.41	1.96	588	32	20.1	381	56.7	66.2	16.7	14.1	16%	84%
Pradera x JMAS	1A18	in	15.5 km	7	7.5	38.1	286	149	423	2.5	2.5	0.41	1.46	590	36	21.3	171	56.8	62.8	16.5	14.8	16%	84%
Parques Indust x JMAS	1A19	out	12.5 km	6	7.5	49.2	369	174	563	3.9	3.9	0.64	1.66	542	27	24.1	138	47.0	53.3	16.1	14.0	20%	80%

43,377 27,586 59,169

Summary for bus company 1B

Route	dir	distance	Demand									Performance										
			N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops@mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate	
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn
Morelos x Erendira 1B01	out	21.5 km	11	90.0	57.9	5,212	2,668	7,756	2.7	3.2	0.56	1.63	504	290	12.7	189	66.7	78.4	19.7	16.4	13%	87%
	in	20.1 km	11	90.0	76.0	6,840	5,053	8,627	3.8		0.70	1.73	414	314	14.5	173	74.5	83.4	16.3	14.4	16%	84%
Morelos x Jilotepec 1B02	out	19.1 km	9	40.5	46.3	1,877	1,101	2,652	2.4	3.0	0.48	1.13	458	341	14.1	279	62.1	70.8	18.6	16.2	16%	84%
	in	19.4 km	9	40.5	67.8	2,745	1,831	3,659	3.5		0.65	1.91	387	299	15.5	159	69.7	76.1	17.0	15.3	19%	81%
Torres x Hiedra 1B03	out	17.9 km	10	71.0	56.4	4,004	2,135	5,874	3.1	3.0	0.55	1.47	402	260	12.5	120	61.1	78.8	18.0	13.7	15%	85%
	in	18.9 km	11	71.0	54.4	3,860	2,640	5,080	2.9		0.52	1.28	505	385	15.5	565	63.4	71.8	18.0	15.8	15%	85%
Torres x Avenida 1B04	out	17.4 km	12	65.0	54.6	3,548	2,390	4,706	3.1	2.8	0.54	1.47	392	300	14.3	178	64.7	83.3	16.4	12.5	16%	84%
	in	17.7 km	11	65.0	44.9	2,919	1,811	4,027	2.5		0.49	1.13	499	377	16.2	140	60.8	67.3	17.5	15.8	16%	84%
						31,005	19,629	42,380														

Summary for bus company 2A

		Demand										Performance											
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops @mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Farmacia	2A01	out	6.5 km	21	86.0	26.5	2,281	1,401	3,161	4.1	4.4	0.30	1.00	379	210	13.3	241	26.6	35.3	15.0	11.1	14%	86%
		in		22	86.0	30.5	2,619	1,970	3,268	4.7		0.37	1.00	348	208	15.1	301	26.4	31.7	14.8	12.2	18%	82%
Jazmines	2A02	out	7.3 km	19	83.0	28.1	2,328	1,447	3,209	3.8	3.7	0.40	1.44	337	170	8.6	45	33.0	86.8	14.4	5.1	9%	91%
		in		18	83.0	26.8	2,223	1,642	2,803	3.5		0.40	1.29	352	216	11.4	145	26.9	35.3	18.2	12.9	15%	85%
							9,451	6,461	12,441														

Summary for bus company 2B

Route	dir	distance	Demand									Performance											
			N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Chihuahua x Campa	2B01	2-wy	11.9 km	16	20.5	55.5	1,138	752	1,524	4.7	4.7	0.48	1.50	345	277	12.1	75	53.7	62.3	13.4	11.5	13%	87%
Chihuahua x H. Nal	2B02	2-wy	10.7 km	16	20.5	52.1	1,067	703	1,431	4.9	4.9	0.51	2.28	332	224	15.5	411	53.6	59.3	12.0	10.9	16%	84%
Sierra	2B03	out	4.2 km	18	72.5	27.4	1,990	934	3,045	6.6	5.4	0.52	1.97	281	173	15.2	309	22.4	30.5	11.5	8.2	17%	83%
		in	7.2 km	18	72.5	33.8	2,453	1,796	3,110	4.7		0.47	1.83	293	200	14.6	97	35.4	45.2	12.3	9.6	17%	83%
Barrio Alto	2B04	out	5.1 km	17	72.0	29.1	2,096	965	3,228	5.7	4.9	0.49	2.22	317	195	11.8	58	24.8	33.5	12.8	9.1	13%	87%
		in	7.8 km	17	72.0	34.4	2,478	1,662	3,293	4.4		0.47	1.50	317	223	11.8	95	36.5	40.5	12.9	11.6	13%	87%
Figueroa	2B05	out	4.2 km	18	71.5	28.4	2,034	1,130	2,938	6.8	5.7	0.35	1.39	259	161	16.1	93	20.3	25.0	12.6	10.1	21%	79%
		in	6.3 km	18	71.5	31.6	2,260	1,330	3,191	5.0		0.41	2.16	259	169	17.7	92	35.7	50.0	10.7	7.5	20%	80%
						15,516	9,271	21,760															

Summary for bus company 2-Lazaro

(Routes operated with Lineas de Juarez. Each company runs the route every other week)

		Demand										Performance											
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Lázaro-Fronte (sampling under LJ)	LJ05	out	11.6 km	10	133.5	47.2	6,301	3,888	8,714	4.1	4.9	0.41	1.14	350	257	17.5	293	45.6	50.4	15.3	13.8	21%	79%
		in	12.6 km	9	133.5	70.1	9,360	4,963	13,757	5.6		0.63	2.65	327	251	18.6	470	51.6	58.3	14.7	12.9	23%	77%
Periodista-Fronte	2L02	out	5.8 km	11	129.0	32.3	4,163	1,696	6,631	5.6	4.9	0.51	1.44	363	215	8.2	65	20.8	31.6	17.6	11.0	10%	90%
		in	16.8 km	10	129.0	78.9	10,178	7,111	13,246	4.7		0.52	1.92	346	270	10.7	318	72.8	81.1	13.9	12.4	12%	88%
							30,002	17,658	42,347														

Summary for bus company 3A

			Demand									Performance										
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate	
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn
Escobedo x Altamirano 3A01	out	5.0 km	51	158.0	22.5	3,552	2,071	5,032	4.5	4.3	0.40	1.33	317	185	11.2	73	21.8	28.8	13.9	10.4	13%	87%
	in	4.4 km	51	158.0	18.3	2,885	1,992	3,778	4.1	4.3	0.32	0.83	335	183	13.8	200	17.9	23.0	15.0	11.5	17%	83%
Escobedo x Velarde 3A03	out	5.2 km	27	151.0	21.0	3,177	1,895	4,458	4.1	4.4	0.28	1.20	365	178	14.4	311	23.0	30.3	13.9	10.3	15%	85%
	in	4.7 km	27	151.0	22.7	3,434	2,462	4,405	4.9	4.4	0.38	1.36	327	195	10.3	45	17.3	22.5	16.5	12.5	14%	86%
						13,047	8,421	17,673														

Summary for bus company 3B

Route	dir	distance	Demand									Performance											
			N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Izquierda x Arriba	3B01	out in	6.0 km 9.4 km	14 14	56.5 56.5	32.9 46.2	1,860 2,611	781 1,593	2,940 3,629	5.4 4.9	5.1	0.61 0.54	1.94 1.63	373 361	195 254	15.6 15.9	59 135	29.7 49.8	40.2 63.9	13.0 11.5	9.0 8.8	14% 14%	86% 86%
Zapata	3B02	out in	6.2 km 9.3 km	11 10	53.5 53.5	25.8 23.9	1,381 1,279	355 849	2,408 1,708	4.2 2.6	3.2	0.52 0.34	1.25 0.96	408 477	188 332	10.8 14.6	71 187	29.3 51.4	38.1 56.8	12.9 10.9	9.7 9.8	9% 9%	91% 91%
Izquierda x Abajo	3B03	out in	6.1 km 6.1 km	14 14	56.0 56.0	32.3 32.6	1,808 1,828	635 953	2,981 2,703	5.3 5.4	5.3	0.74 0.55	2.38 2.08	418 445	191 185	11.2 11.6	73 104	34.0 36.6	49.3 53.3	11.1 10.2	7.4 6.9	8% 7%	92% 93%
Navarro	3B04	out in	7.5 km 10.7 km	9 9	58.0 58.0	26.8 45.9	1,553 2,662	- 1,145	3,561 4,178	3.6 4.3	4.0	0.56 0.56	1.72 2.16	751 565	326 368	16.4 22.8	72 119	27.7 50.1	40.6 52.9	16.9 12.8	11.1 12.1	10% 14%	90% 86%
Derecha	3B05	out in	5.2 km 5.9 km	14 14	71.0 71.0	33.4 37.1	2,373 2,632	981 2,054	3,765 3,210	6.4 6.2	6.3	0.67 0.58	2.14 1.30	355 360	154 229	11.6 10.8	128 75	25.0 30.3	34.5 35.8	13.0 11.9	9.1 10.0	11% 10%	89% 90%
Anexas	3B06	out in	5.3 km 5.1 km	15 15	86.0 86.0	30.9 24.2	2,655 2,081	1,286 1,336	4,023 2,826	5.8 4.7	5.3	0.56 0.34	1.78 0.88	298 339	196 232	17.0 14.9	95 68	28.6 23.7	51.1 30.7	11.7 13.2	6.2 10.0	18% 16%	82% 84%
						24,723			11,969	37,933													

Summary for bus company 4

Route	dir	distance	Demand									Performance											
			N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops@mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Rivereño-Conifer 4R02	out	12.3 km	18	32.0	49.6	1,586	1,247	1,925	4.0	2.8	0.54	1.44	495	341	13.0	184	42.9	63.3	17.6	11.6	12%	88%	
	in	15.0 km	16	32.0	26.4	846	566	1,126	1.8		0.32	1.16	914	681	12.7	106	38.3	43.9	23.7	20.5	9%	91%	
Rivereño x Fidel Velázque 4R03	out	12.6 km	25	97.5	45.8	4,466	3,615	5,316	3.6	3.9	0.49	1.64	516	286	10.1	122	38.6	51.3	20.3	14.7	11%	89%	
	in	13.0 km	25	97.5	53.7	5,238	2,738	7,737	4.1		0.82	5.42	513	372	9.2	79	39.0	47.4	20.3	16.5	10%	90%	
Frontera Nva-Smart Cntry 4R04	out	9.9 km	4	5.0	17.5	88	12	163	1.8	2.2	0.27	0.51	733	521	12.0	70	37.7	44.3	16.0	13.4	7%	93%	
	in	9.4 km	4	5.0	24.8	124	83	165	2.6		0.27	0.53	439	410	13.2	75	41.9	44.0	13.5	12.9	11%	89%	
Maquilas x 16 4R05	out	16.5 km	16	81.0	59.7	4,835	3,368	6,301	3.6	4.7	0.63	1.69	426	279	15.5	538	62.5	86.0	16.2	11.5	16%	84%	
	in	11.7 km	16	81.0	73.8	5,979	2,292	9,666	6.3		0.81	3.82	312	225	16.0	196	58.7	73.9	12.2	9.5	17%	83%	
Jardines del Bosque 4R06	out	12.9 km	4	3.5	47.5	166	122	210	3.7	2.4	0.49	0.86	384	358	16.6	370	55.0	59.7	14.1	12.9	17%	83%	
	in	14.6 km	4	3.5	18.3	64	7	121	1.3		0.23	0.61	1100	729	14.6	166	34.7	41.4	25.6	21.1	9%	91%	
						23,390	14,049	32,730															

Summary for bus company 5A

Route	dir	distance	Demand									Performance											
			N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Cereso	5A02	out in	11.2 km 12.4 km	8 8	60.0 60.0	57.1 57.6	3,428 3,458	1,534 2,401	5,321 4,514	5.1 4.6	4.9	0.69 0.73	1.50 1.33	374 377	243 259	15.7 12.9	570 70	51.7 54.9	66.3 60.6	13.4 13.7	10.1 12.3	15% 13%	85% 87%
Pantoja	5A03	out in	13.0 km 12.6 km	14 14	34.7 34.7	42.2 53.0	1,463 1,837	902 1,262	2,025 2,413	3.2 4.2	3.7	0.61 0.56	1.42 1.51	430 348	277 238	11.2 9.9	591 115	45.4 44.9	60.5 52.9	17.8 17.2	12.9 14.3	12% 13%	88% 87%
Cereso x Eje Vial	5A04	out in	16.5 km 17.1 km	19 18	16.0 16.0	26.3 31.9	421 511	187 363	655 659	1.6 1.9	1.7	0.38 0.41	1.31 1.39	864 786	413 449	23.3 14.6	633 222	52.9 45.7	94.0 63.3	21.3 23.4	10.5 16.2	14% 12%	86% 88%
Division x Madero	5A05	out in	12.3 km 12.7 km	10 10	36.5 36.5	42.2 62.0	1,540 2,263	988 1,488	2,093 3,038	3.4 4.9	4.2	0.52 0.86	1.45 2.25	406 327	294 254	14.4 18.7	374 715	44.8 49.6	58.2 60.9	17.1 15.8	12.7 12.5	16% 24%	84% 76%
Portillo	5A06	out in	11.5 km 12.8 km	8 8	29.5 29.5	46.1 58.3	1,361 1,718	934 1,155	1,788 2,282	4.0 4.6	4.3	0.64 0.62	1.19 1.47	371 349	287 266	11.1 15.1	335 218	44.8 51.4	63.3 60.6	15.9 15.2	10.9 12.7	13% 18%	87% 82%
Cereso x Ruta Nueva	5A07	out in	11.2 km 12.4 km	9 9	27.5 27.5	79.2 50.0	2,179 1,375	1,439 760	2,918 1,990	7.1 4.0	5.5	0.73 0.61	1.72 1.43	224 348	157 211	26.2 18.0	943 119	82.3 50.9	97.4 62.1	8.2 14.9	6.9 12.0	26% 21%	74% 79%
						21,554			13,412	29,696													

Summary for bus company 5B

		Demand										Performance											
Route	dir	distance	N	bus/day	pax/bus	pax/day			paxd/kmr	paxd/kmr	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
				avg	avg	avg	Min	Max	avg	2-way avg	avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Tercera x Curva	5B01	out	12.6 km	14	39.5	30.3	1,196	499	1,893	2.4	2.6	0.50	1.25	574	287	11.2	197	49.7	63.2	16.1	12.0	8%	92%
		in	12.8 km	12	39.5	35.2	1,389	896	1,882	2.7		0.37	1.34	602	279	10.8	78	50.8	55.5	15.2	13.9	8%	92%
Rev. mexicana x Curva	5B02	out	12.5 km	24	28.8	29.3	841	567	1,114	2.3	2.5	0.40	1.31	561	277	14.2	124	45.3	53.6	16.7	14.0	12%	88%
		in	12.6 km	24	28.8	33.2	955	708	1,202	2.6		0.38	1.06	546	280	13.3	112	40.4	52.8	19.2	14.3	13%	87%
Presa-Granjas	5B03	out	12.3 km	9	30.0	28.2	847	246	1,448	2.3	2.4	0.43	1.05	518	292	7.8	43	51.9	59.8	14.4	12.3	6%	94%
		in	15.3 km	9	30.0	38.6	1,157	639	1,674	2.5		0.49	1.71	562	403	10.0	123	61.0	84.6	15.5	10.9	7%	93%
Eje Vial x División	5B05	out	14.1 km	11	72.0	50.6	3,646	1,010	6,281	3.6	3.4	0.90	3.19	600	300	14.4	129	47.3	65.0	19.1	13.0	12%	88%
		in	17.0 km	11	72.0	56.3	4,052	2,364	5,739	3.3		0.77	3.09	635	405	14.6	135	53.9	74.8	19.2	13.7	12%	88%
Eje vial x Revolución	5B06	out	12.3 km	11	49.0	32.3	1,581	766	2,397	2.6	3.1	0.56	1.19	612	309	11.0	81	35.0	44.1	21.9	16.8	11%	89%
		in	11.2 km	11	49.0	39.9	1,956	759	3,152	3.6		0.64	2.16	523	272	15.1	122	36.9	45.0	18.4	14.9	15%	85%
Eje vial x Tercera	5B07	out	10.6 km	13	44.5	39.9	1,777	1,178	2,375	3.8	3.6	0.47	1.24	419	320	9.6	244	40.1	47.9	16.0	13.2	10%	90%
		in	10.5 km	13	44.5	35.1	1,561	852	2,269	3.3		0.47	1.85	449	292	10.5	130	39.7	46.4	16.0	13.6	10%	90%
							20,956	10,485	31,428														

Summary for bus company 6

Route	dir	distance	Demand									Performance											
			N	bus/day	pax/bus	pax/day			paxd/kmr	paxd/kmr	occup rate		stops@mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
				avg	avg	avg	Min	Max	avg	2-way avg	avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
27	6R01	out	9.6 km	14	64.5	35.8	2,308	1,567	3,049	3.7	3.6	0.70	1.90	341	246	15.9	847	46.8	64.4	12.6	8.9	16%	84%
		in	9.7 km	14	64.5	32.9	2,119	1,445	2,793	3.4		0.69	1.50	408	294	12.6	147	28.4	33.2	20.7	17.5	18%	82%
28	6R02	out	9.8 km	13	49.5	32.1	1,588	1,179	1,997	3.3	3.4	0.49	1.17	359	234	11.5	94	45.5	55.8	13.2	10.6	12%	88%
		in	10.9 km	13	49.5	37.8	1,870	1,316	2,423	3.5		0.63	2.39	388	280	13.3	91	43.8	51.4	15.2	12.7	14%	86%
29	6R03	out	12.2 km	13	52.0	24.1	1,252	802	1,702	2.0	2.8	0.35	1.17	548	371	12.7	196	40.6	52.2	18.5	14.1	12%	88%
		in	10.1 km	13	52.0	37.4	1,944	1,612	2,276	3.7		0.60	1.33	364	258	19.1	1080	48.4	61.5	12.6	9.8	18%	82%
30	6R04	out	12.1 km	13	51.5	33.6	1,731	965	2,497	2.8	2.8	0.57	1.65	559	327	12.9	133	54.3	63.3	13.6	11.5	9%	91%
		in	12.9 km	13	51.5	35.7	1,838	1,338	2,338	2.8		0.56	1.31	509	307	12.2	75	49.6	53.2	15.7	14.5	10%	90%
Ruta Nueva	6R05	out	16.2 km	10	47.5	54.6	2,594	1,893	3,294	3.4	2.8	0.64	1.50	389	324	11.8	184	69.3	77.7	14.1	12.5	12%	88%
		in	16.9 km	10	47.5	36.7	1,743	1,130	2,356	2.2		0.46	1.42	529	393	13.8	128	52.6	60.2	19.4	16.8	14%	86%
28 Seguro Nuevo	6R06	out	14.1 km	11	21.5	30.1	647	344	950	2.1	2.2	0.34	1.13	511	336	11.8	86	63.5	92.5	13.8	9.2	9%	91%
		in	15.2 km	11	21.5	33.5	719	484	954	2.2		0.50	2.25	544	381	13.5	78	57.7	63.4	15.9	14.4	11%	89%
						20,353		14,077		26,629													

Summary for bus company 7

		Demand										Performance											
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Morelos	7R01	out in	13.4 km 12.0 km	10	32.0	35.5	1,136	644	1,628	2.6	2.6	0.65	3.33	506	335	15.8	131	58.8	70.9	13.8	11.3	12%	88%
				10	32.0	31.6	1,011	759	1,264	2.6	2.6	0.35	0.94	465	353	15.8	185	55.9	60.3	12.9	11.9	12%	88%
Mirador	7R03	out in	9.4 km 8.8 km	13	65.0	45.5	2,955	1,959	3,951	4.8	4.8	0.58	1.56	357	260	16.9	91	36.7	45.8	15.7	12.3	20%	80%
				13	65.0	42.5	2,765	2,039	3,491	4.8	4.8	0.61	1.28	335	244	15.1	81	35.3	40.1	15.0	13.1	19%	81%
Grecia	7R04	out in	9.7 km 9.6 km	10	20.5	28.2	578	190	967	2.9	3.1	0.47	1.42	491	314	12.9	86	38.8	46.7	15.3	12.5	11%	89%
				10	20.5	32.2	660	415	906	3.3	3.3	0.41	1.31	417	310	11.5	140	42.3	45.4	13.7	12.7	10%	90%
Aztecas x Nahoas	7R05	out in	9.4 km 10.3 km	11	21.0	25.4	533	288	778	2.7	3.0	0.40	1.00	482	323	13.5	65	36.6	40.7	15.6	13.8	12%	88%
				11	21.0	34.2	718	537	898	3.3	3.3	0.38	1.09	439	303	19.0	758	43.6	51.4	14.3	12.0	17%	83%
Santa Maria	7R07	out in	10.1 km 10.0 km	12	36.5	32.6	1,189	556	1,822	3.2	3.2	0.52	1.47	420	281	14.5	109	47.8	56.4	12.9	10.8	12%	88%
				12	36.5	32.3	1,177	805	1,550	3.2	3.2	0.41	0.86	445	304	11.5	122	42.6	48.7	14.3	12.3	10%	90%
Mexico 68	7R08	out in	9.6 km 9.8 km	12	68.5	33.3	2,283	1,059	3,507	3.5	3.3	0.47	1.44	357	179	14.2	130	41.6	51.8	14.1	11.2	15%	85%
				12	68.5	31.0	2,124	1,510	2,737	3.2	3.2	0.35	1.33	383	281	13.6	88	44.1	50.5	13.5	11.7	13%	87%
				17,129			10,760		23,499														

Summary for bus company 8A

Route	dir	distance	Demand									Performance											
			N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops @mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Seguro Social nuevo	8A01	2-wy	26.9 km	9	58.5	85.3	4,992	2,909	7,075	3.2	3.2	0.48	1.96	536	364	16.4	490	112.0	117.6	14.5	13.7	12%	88%
Curva	8A02	2-wy	20.3 km	18	54.5	66.3	3,615	2,585	4,645	3.3	3.3	0.43	1.39	566	290	27.3	387	83.7	108.4	14.7	11.2	20%	80%
						8,607	5,494	11,720															

Summary for bus company 8B

			Demand									Performance										
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops@mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate	
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn
Futurama	8B01	2-wy		71.0	99.9	7,093	5,168	9,018	4.7	4.7	0.63	1.44	402	283	24.8	519	87.8	97.8	14.6	13.0	25%	75%
Seguro Social nuevo (Ruta loca larga)	8B02	out in		34.5	68.1	2,350	1,263	3,436	3.8	4.0	0.55	2.00	429	373	15.3	103	67.4	88.3	16.2	12.2	16%	84%
Presidencia-Plutarco (Ruta loca corta)	8B03	out in		12.0	42.3	508	278	738	4.3	2.4	0.52	1.31	509	410	33.0	556	48.4	53.3	12.3	11.1	22%	78%
						11,596	7,593	15,599														

Summary for bus company 10

			Demand									Performance											
Route	dir	distance	N	bus/day	pax/bus	pax/day			paxd/km	paxd/km	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
				avg	avg	avg	Min	Max	avg	2-way avg	avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Avicola x Abajo	1001	2-wy	18.3 km	15	37.3	62.2	2,317	1,654	2,980	3.4	3.4	0.49	1.68	405	291	23.6	697	88.0	102.0	12.6	10.8	20%	80%
Sarabia x Arriba	1002	2-wy	15.2 km	16	38.0	45.3	1,720	1,190	2,249	3.0	3.0	0.44	1.43	499	345	28.2	558	62.5	73.3	14.7	12.4	23%	77%
Mesa	1003	out	8.3 km	14	20.5	28.4	581	293	869	3.4	3.0	0.56	1.53	596	377	22.2	192	31.1	40.9	16.6	12.2	17%	83%
		in	9.0 km	14	20.5	24.2	496	334	658	2.7		0.31	1.03	497	359	19.0	211	32.8	39.2	16.7	13.7	17%	83%
Rancho	1004	out	13.9 km	15	111.5	43.1	4,809	3,460	6,159	3.1	3.2	0.73	1.88	522	355	22.3	861	48.4	65.2	18.1	12.8	20%	80%
		in	12.9 km	15	111.5	42.9	4,780	2,556	7,004	3.3		0.64	2.62	475	349	18.3	249	50.2	70.0	15.8	11.1	17%	83%
Retiro	1005	out	10.9 km	12	78.5	29.8	2,342	1,111	3,572	2.7	2.9	0.63	1.75	575	322	17.2	360	38.8	47.4	17.7	13.9	14%	86%
		in	10.6 km	12	78.5	32.3	2,532	963	4,100	3.0		0.47	2.06	534	273	15.1	82	44.1	61.0	15.4	10.5	11%	89%
Sarabia x Abajo	1007	2-wy	14.8 km	14	38.0	51.9	1,971	1,349	2,592	3.5	3.5	0.48	1.69	427	302	18.5	552	60.1	73.3	15.1	12.1	18%	82%
Salinas x Periodista	1008	out	9.1 km	20	14.0	24.7	345	188	503	2.7	3.0	0.51	2.13	634	351	40.7	1221	43.8	60.8	13.0	9.0	22%	78%
		in	8.8 km	21	14.0	28.2	395	265	525	3.2		0.41	1.42	449	225	21.6	828	46.2	115.7	12.3	4.6	15%	85%
Avicola x Arriba	1009	2-wy	18.7 km	23	39.0	97.9	3,819	1,089	6,548	5.2	5.2	0.93	15.65	403	275	25.8	900	86.7	115.6	13.1	9.7	23%	77%
Salinas x Arroyo	1010	2-wy	18.7 km	11	14.0	48.1	673	426	920	2.6	2.6	0.46	2.63	538	456	37.4	932	89.7	103.2	12.6	10.9	24%	76%
						26,780	14,878	38,682															

Summary for bus company CENTRAL

		Demand										Performance											
Route	dir	distance	N	bus/day	pax/bus	pax/day			paxd/kmr	paxd/kmr	occup rate		stops@mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
				avg	avg	avg	Min	Max	avg	2-way avg	avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Central x 16	CE01	out	9.9 km	12	29.0	14.1	408	245	572	1.4	2.0	0.17	0.56	761	521	20.1	172	38.7	43.5	15.5	13.6	11%	89%
		in	10.5 km	12	29.0	25.8	749	490	1,009	2.5		0.27	0.96	507	300	21.5	176	39.4	43.7	16.1	14.4	19%	81%
Tlaxcala	CE03	out	10.5 km	12	153.0	51.8	7,918	5,623	10,212	4.9	3.9	0.42	1.31	282	234	16.9	503	58.5	69.0	10.9	9.2	18%	82%
		in	14.3 km	12	153.0	46.3	7,089	4,874	9,304	3.2		0.42	1.32	425	357	16.9	180	48.0	57.6	18.0	14.9	20%	80%
							16,164	11,232	21,097														

Summary for bus company CIRCUNVALACION ROJO

		Demand										Performance											
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Cableados x Escobar	CR03	out	10.4 km	13	73.5	44.4	3,262	2,066	4,459	4.2	3.7	0.57	2.68	305	205	15.5	135	53.3	66.1	11.9	9.5	17%	83%
		in	12.8 km	13	73.5	41.7	3,064	2,269	3,859	3.3		0.50	1.38	438	327	13.9	136	46.5	53.3	16.5	14.4	15%	85%
Chapultepec	CR04	out	5.3 km	13	45.0	16.0	720	340	1,100	3.0	2.5	0.34	0.97	454	229	23.0	153	28.1	38.7	11.7	8.2	16%	84%
		in	7.2 km	15	45.0	15.7	708	325	1,091	2.2		0.39	0.83	898	402	29.1	1062	25.5	42.0	18.8	10.3	15%	85%
Rivereño	CR05	out	10.5 km	7	27.0	30.3	818	-	1,636	2.9	2.6	0.53	1.86	1097	700	35.2	243	35.7	62.0	19.1	10.2	16%	84%
		in	12.3 km	7	27.0	28.1	760	267	1,253	2.3		0.83	2.43	1076	455	39.2	1482	33.5	39.8	22.6	18.5	22%	78%
							9,332	5,267	13,398														

Summary for bus company JUAREZ AEROPUERTO

		Demand										Performance										
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate	
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mnt
Centro-Eréndira JA01	out	17.4 km	8	30.5	73.8	2,249	1,288	3,211	4.2	3.8	0.81	2.43	435	281	15.9	110	73.6	101.7	14.6	10.3	14%	86%
	in	18.2 km	6	30.5	59.8	1,825	797	2,852	3.3		0.50	1.37	499	405	14.1	68	67.0	74.1	16.4	14.7	13%	87%
San Lorenzo-Eréndira JA02	out	14.2 km	9	36.5	48.8	1,780	983	2,577	3.4	3.2	0.52	1.25	433	330	18.6	169	56.3	65.2	15.5	13.1	18%	82%
	in	13.8 km	9	36.5	39.7	1,448	859	2,036	2.9		0.41	1.25	480	383	15.2	126	51.2	60.3	16.5	13.7	14%	86%
Centro-Lucio Blanco JA03	out	21.0 km	8	33.5	86.6	2,902	1,501	4,303	4.1	3.9	0.77	2.38	334	239	11.4	137	81.3	102.8	15.9	12.3	15%	85%
	in	22.4 km	8	33.5	81.1	2,718	1,576	3,859	3.6		0.86	1.97	399	302	12.0	86	76.5	96.0	19.1	14.0	15%	85%
San Lorenzo-Lucio Blanco JA04	out	17.8 km	9	38.0	58.9	2,238	637	3,839	3.3	3.3	0.77	2.19	521	297	20.4	197	64.7	77.5	17.2	13.8	18%	82%
	in	19.1 km	9	38.0	62.0	2,356	1,449	3,263	3.2		0.65	1.97	501	290	18.8	256	65.5	77.7	17.7	14.8	18%	82%
Centro-Km 20 JA05	out	22.5 km	7	33.5	64.3	2,154	1,303	3,004	2.9	2.8	0.63	1.44	467	381	12.7	471	70.4	84.5	19.4	16.0	14%	86%
	in	23.1 km	7	33.5	62.9	2,106	1,533	2,678	2.7		0.73	3.56	523	481	13.0	278	75.0	81.3	18.5	17.0	13%	87%
San Lorenzo-Km 20 JA06	out	18.9 km	9	37.0	66.6	2,463	1,533	3,392	3.5	3.1	0.66	1.86	546	411	22.4	201	65.2	89.3	18.1	12.7	20%	80%
	in	19.0 km	8	37.0	51.3	1,896	1,104	2,689	2.7		0.52	1.78	616	464	18.8	176	57.2	64.1	20.1	17.8	17%	83%
Centro-Km 18 JA07	out	21.3 km	8	34.0	75.1	2,554	1,323	3,785	3.5	2.9	0.73	2.09	429	338	21.1	172	78.2	91.0	16.8	14.0	22%	78%
	in	23.6 km	6	34.0	57.0	1,938	637	3,239	2.4		0.63	2.00	576	394	20.7	303	75.0	84.6	19.1	16.8	19%	81%
Centro-Virreyes JA08	out	16.5 km	9	30.5	64.6	1,969	1,278	2,659	3.9	4.0	0.76	1.71	368	284	10.7	178	64.0	78.7	15.6	12.6	12%	88%
	in	17.2 km	8	30.5	70.3	2,143	1,637	2,648	4.1		0.77	1.84	369	352	10.4	123	69.2	80.7	15.1	12.8	12%	88%
San Lorenzo-Km 18 JA09	out	18.0 km	8	38.0	51.9	1,971	1,187	2,755	2.9	2.8	0.47	1.28	485	399	17.8	288	57.7	68.9	19.0	15.6	19%	81%
	in	19.6 km	8	38.0	51.6	1,962	1,165	2,759	2.6		0.48	1.28	563	425	13.7	246	60.4	84.8	20.4	13.8	13%	87%
San Lorenzo-Virreyes JA10	out	13.1 km	5	37.0	47.6	1,761	396	3,126	3.6	3.7	0.53	1.25	496	364	20.0	234	53.3	67.9	15.0	11.6	16%	84%
	in	13.1 km	6	37.0	48.5	1,795	709	2,880	3.7		0.62	1.59	441	299	14.3	203	51.8	67.1	15.5	11.8	14%	86%

42,227 22,895 61,558

Summary for bus company JUAREZ ZARAGOZA

		Demand											Performance										
Route	dir	distance	N	bus/day	pax/bus	pax/day			paxd/kmr	paxd/kmr	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
				avg	avg	avg	Min	Max	avg	2-way avg	avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Salvarcar	JZ01	out	27.3 km	7	31.0	86.6	2,684	1,082	4,285	3.2	3.0	0.76	2.16	447	276	15.0	195	87.1	99.6	18.9	16.4	17%	83%
		in	27.0 km	5	31.0	77.8	2,412	1,775	3,049	2.9		0.60	1.50	480	380	16.0	390	82.7	90.7	19.6	17.8	18%	82%
Jilotepc	JZ02	out	30.2 km	8	42.0	75.4	3,166	2,637	3,695	2.5	3.0	0.48	1.38	548	465	13.8	202	90.2	110.4	20.5	16.4	14%	86%
		in	30.3 km	7	42.0	103.1	4,332	1,817	6,847	3.4		0.82	1.97	502	365	15.5	253	111.7	134.7	16.4	13.5	14%	86%
Satélite	JZ03	out	17.0 km	10	42.0	61.8	2,596	1,733	3,458	3.6	3.5	0.89	2.41	447	348	12.8	131	58.6	76.3	17.7	13.4	14%	86%
		in	16.4 km	9	42.0	56.3	2,366	1,567	3,165	3.4		0.74	1.64	502	342	10.8	160	50.0	62.0	20.1	15.9	12%	88%
Barrio Azul-Tierra Nueva	JZ04	out	26.6 km	7	31.0	64.4	1,997	983	3,011	2.4	2.6	0.68	1.78	630	325	15.9	110	85.9	103.5	18.9	15.4	13%	87%
		in	25.7 km	7	31.0	73.3	2,272	1,356	3,187	2.8		0.81	2.32	549	415	17.2	354	85.3	94.0	18.2	16.4	16%	84%
Recinto	JZ05	out	11.8 km	9	28.5	42.7	1,216	659	1,773	3.6	2.8	0.89	3.11	455	288	12.3	97	41.2	57.2	17.9	12.4	13%	87%
		in	12.7 km	9	28.5	25.0	713	168	1,257	2.0		0.44	1.67	756	551	15.9	255	37.4	45.6	20.7	16.7	12%	88%
Sauzal	JZ06	out	33.6 km	6	30.5	76.8	2,343	1,005	3,682	2.3	2.5	0.69	1.53	642	448	15.4	137	101.8	145.7	21.5	13.8	13%	87%
		in	27.6 km	6	30.5	75.8	2,313	1,652	2,973	2.8		0.98	4.17	590	475	16.2	250	85.2	103.0	19.8	16.1	15%	85%
Torres	JZ07	out	25.8 km	6	30.5	72.5	2,211	995	3,427	2.8	2.8	0.61	1.53	476	315	12.8	100	86.2	99.2	18.2	15.6	13%	87%
		in	27.1 km	6	30.5	74.2	2,262	1,307	3,217	2.7		0.62	1.39	476	362	15.0	308	93.2	107.8	17.6	15.1	15%	85%
Zaragoza Directo	JZ08	out	23.2 km	6	42.5	61.8	2,628	1,238	4,017	2.7	2.5	0.73	1.77	631	465	16.4	181	75.5	88.5	18.7	15.7	13%	87%
		in	22.3 km	6	42.5	54.0	2,295	1,165	3,425	2.4		0.72	1.78	670	544	16.9	210	71.8	79.0	18.8	17.0	13%	87%
IMSS 48-Tierra Nueva	JZ09	out	13.1 km	9	29.5	28.6	842	458	1,227	2.2	2.0	0.78	6.50	670	423	12.4	64	53.3	61.8	15.0	12.7	8%	92%
		in	16.1 km	9	29.5	29.2	862	544	1,181	1.8		0.24	0.81	622	424	21.2	1020	68.0	88.9	14.5	10.9	13%	87%
				39,510			22,143		56,876														

Summary for bus company LINEAS DE JUAREZ

(See routes Lázaro-Fronte and Periodista-Fronte under bus company 2-Lázaro)

		Demand										Performance											
Route	dir	distance	N	bus/day	pax/bus	pax/day			paxd/kmr	paxd/kmr	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
				avg	avg	avg	Min	Max	avg	2-way avg	avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Crucero Altavista	LJ04	out	12.1 km	11	121.5	48.8	5,931	3,702	8,161	4.0	4.0	0.53	1.76	360	242	15.9	139	48.7	53.5	14.9	13.6	18%	82%
		in	11.7 km	11	121.5	46.6	5,666	2,755	8,577	4.0		0.44	1.39	390	273	23.8	448	45.5	54.9	16.2	12.8	26%	74%
							11,598	6,457	16,738														

Summary for bus company MERCADO DE ABASTOS

			Demand									Performance											
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr 2-way avg	occup rate		stops@mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Galeana x Eje	MA01	2-wy	13.6 km	20	31.5	32.5	1,022	873	1,171	2.4	2.4	0.34	1.10	528	425	15.7	1016	54.5	66.1	15.1	12.4	12%	88%
Galeana x Libertad	MA02	2-wy	13.4 km	21	47.5	50.0	2,377	1,951	2,803	3.7	3.7	0.39	1.73	361	269	15.6	129	60.7	70.9	13.3	11.4	16%	84%
Flores Magon	MA03	2-wy	14.4 km	21	43.5	44.0	1,916	1,324	2,508	3.1	3.1	0.37	1.15	441	253	13.9	174	59.4	73.7	14.8	11.7	13%	87%
JMAS x Eje	MA04	2-wy	14.7 km	7	8.5	20.0	170	48	292	1.4	1.4	0.24	0.91	971	545	14.7	105	49.8	53.3	17.9	16.6	7%	93%
Galeana x Carrizal	MA05	2-wy	14.0 km	19	44.5	31.8	1,417	968	1,866	2.3	2.3	0.26	0.92	524	319	15.0	366	56.8	70.5	14.9	11.9	12%	88%
Palo Chino	MA06	2-wy	16.5 km	15	47.0	49.3	2,319	1,564	3,073	3.0	3.0	0.44	1.72	425	344	17.3	252	74.0	84.0	13.5	11.8	15%	85%
						9,221	6,729	11,713															

Summary for bus company ORIENTE PONIENTE

		Demand										Performance											
Route	dir	distance	N	bus/day	pax/bus	pax/day			paxd/kmr	paxd/kmr	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
				avg	avg	avg	Min	Max	avg	all-way avg	avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Arroyo	OP01	1	6.0 km	12	78.0	10.7	832	-	1,924	1.8	2.4	0.35	1.00	970	315	11.0	49	19.0	41.9	23.5	8.6	6%	94%
		2	16.7 km	10	78.0	42.1	3,284	2,001	4,566	2.5		0.38	1.31	649	334	23.4	1630	59.3	72.0	17.2	13.9	17%	83%
		3	16.5 km	7	78.0	41.9	3,265	912	5,617	2.5		0.59	1.61	732	472	14.9	164	46.5	52.9	21.4	18.7	12%	88%
Periodista	OP02	1	5.3 km	11	74.5	18.3	1,361	584	2,138	3.5	2.5	0.30	1.03	472	251	9.4	76	19.6	23.9	16.4	13.3	9%	91%
		2	21.3 km	11	74.5	50.4	3,752	1,623	5,881	2.4		0.47	1.50	607	434	13.9	142	68.7	77.3	18.7	16.5	12%	88%
		3	11.0 km	12	74.5	25.6	1,906	629	3,183	2.3		0.41	1.14	803	425	12.9	229	35.0	42.3	19.1	15.7	8%	92%
				14,400			5,750	23,311															

Summary for bus company PERMISIONARIOS UNIDOS

		Demand										Performance											
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr all-way avg	occup rate		stops[@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Lomas	PU01	out	18.9 km	11	77.0	54.2	4,172	2,217	6,127	2.9	2.8	0.62	1.58	470	320	15.4	711	67.1	77.1	17.0	14.7	15%	85%
		in	18.0 km	12	77.0	48.8	3,754	2,310	5,198	2.7		0.55	1.50	422	243	11.1	123	63.2	72.7	17.2	14.8	12%	88%
Grajero	PU02	out	18.5 km	11	58.0	50.1	2,905	1,769	4,042	2.7	2.4	0.64	1.81	527	356	16.0	245	61.8	75.0	18.3	14.8	15%	85%
		in	18.9 km	11	58.0	39.8	2,309	1,519	3,100	2.1		0.43	1.27	547	395	12.7	248	56.0	64.9	20.5	17.5	13%	87%
División Sur	PU04	out	15.6 km	14	76.5	49.6	3,792	2,173	5,411	3.2	3.4	0.61	2.31	472	312	20.0	250	53.7	78.0	17.9	12.0	20%	80%
		in	13.5 km	14	76.5	49.9	3,820	2,715	4,924	3.7		0.63	1.63	413	315	16.7	185	43.9	60.2	18.7	13.5	21%	79%
Km 30	PU05	2-wy	50.5 km	8	31.0	113.3	3,511	2,334	4,688	2.2	2.2	0.73	2.11	685	543	18.1	214	167.0	181.9	18.2	16.7	13%	87%
Revolución x Eje	PU06	out	13.2 km	15	37.0	23.9	883	515	1,251	1.8	2.2	0.32	1.17	640	330	13.2	375	41.5	48.6	19.3	16.3	11%	89%
		in	10.8 km	14	37.0	29.1	1,078	574	1,583	2.7		0.47	1.28	495	285	13.2	140	37.4	42.6	17.5	15.3	13%	87%
Revolución x Reforma	PU07	out	13.2 km	15	67.0	36.5	2,443	1,389	3,497	2.8	2.9	0.59	1.59	554	330	20.2	274	48.4	55.8	16.6	14.2	17%	83%
		in	12.0 km	15	67.0	36.8	2,466	1,699	3,232	3.1		0.49	1.53	462	308	15.6	236	40.7	50.3	17.9	14.3	17%	83%
							31,133	19,213	43,053														

Summary for bus company TIERRA NUEVA

		Demand									Performance												
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr all-way avg	occup rate		stops @mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Tierra Nueva	TN01	out	24.4 km	8	118.5	105.4	12,487	7,593	17,380	4.3	4.6	1.07	3.14	368	283	12.7	128	92.1	121.0	16.1	12.1	15%	85%
	in	23.5 km	8	118.5	115.9	13,731	11,006	16,456	4.9		0.97	2.04	341	286	13.1	88	87.5	91.6	16.1	15.4	17%	83%	
						26,218	18,600	33,836															

Summary for bus company TRANSPORTES URBANOS

		Demand										Performance										
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/km avg	paxd/km all-way avg	occup rate		stops @mts		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate	
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn
Cereso (Nte-Sur) TU01	out	13.1 km	13	86.5	35.4	3,061	1,344	4,778	2.7	3.1	0.41	1.53	530	313	12.6	67	38.5	47.5	20.8	16.6	13%	87%
	in	12.4 km	13	86.5	44.6	3,859	2,672	5,046	3.6	3.4	0.45	1.39	442	296	15.8	154	49.1	55.7	15.3	13.4	15%	85%
Cereso (Sur-Nte) TU02	out	12.6 km	12	81.0	44.8	3,632	2,530	4,733	3.6	3.4	0.46	1.28	384	263	17.1	181	45.8	52.3	16.6	14.5	20%	80%
	in	12.9 km	12	81.0	41.6	3,368	2,494	4,243	3.2	3.4	0.39	0.88	377	263	16.4	247	48.6	54.1	16.2	14.3	19%	81%
División Madero (Nte-Sur) TU03	out	12.1 km	11	38.5	36.5	1,407	752	2,062	3.0	3.4	0.46	1.06	429	275	18.4	919	42.5	64.4	18.0	11.3	20%	80%
	in	12.0 km	11	38.5	46.0	1,771	830	2,712	3.8	3.4	0.62	2.00	402	285	16.5	105	42.8	50.8	16.9	14.1	19%	81%
División Madero (Sur-Nte) TU04	out	10.2 km	12	42.0	49.9	2,097	1,032	3,161	4.9	4.3	0.42	1.50	280	179	12.7	170	45.0	50.3	13.7	12.2	17%	83%
	in	13.0 km	12	42.0	50.9	2,139	1,314	2,963	3.9	4.3	0.51	1.40	369	259	16.2	399	50.0	54.3	15.6	14.3	19%	81%
División Ponciano(Nte-Sur) TU06	out	13.3 km	13	36.5	31.5	1,151	689	1,613	2.4	2.6	0.35	1.08	537	325	9.9	89	38.1	47.0	21.2	17.0	11%	89%
	in	13.3 km	13	36.5	36.8	1,342	973	1,712	2.8	2.6	0.34	1.00	452	308	10.7	93	41.4	45.7	19.3	17.4	13%	87%
División Ponciano(Sur-Nte) TU07	out	12.8 km	11	33.0	40.8	1,347	857	1,837	3.2	3.6	0.34	0.87	355	272	12.6	161	45.7	52.4	16.9	14.6	16%	84%
	in	11.7 km	11	33.0	47.4	1,563	935	2,191	4.0	3.6	0.39	1.44	324	230	13.9	157	48.1	53.3	14.7	13.2	17%	83%
Industrial TU08	out	5.2 km	28	146.5	25.5	3,736	2,704	4,768	4.9	5.2	0.42	1.37	326	202	13.6	77	22.4	28.6	14.3	11.0	16%	84%
	in	4.6 km	28	146.5	25.4	3,715	2,813	4,617	5.5	5.2	0.41	1.16	304	220	15.5	325	21.9	37.9	12.9	14.8	18%	82%
Circuito Piedrera x Velarde TU09	out	4.0 km	24	28.5	18.5	528	289	768	4.7	3.9	0.40	1.31	427	232	12.5	71	18.1	22.3	13.3	10.6	11%	89%
	in	5.2 km	23	28.5	17.4	496	282	709	3.4	3.9	0.33	1.22	511	287	15.4	372	19.7	31.1	16.2	10.0	13%	87%
Circuito Piedrera x Carrizal TU10	out	5.6 km	24	43.0	26.0	1,120	719	1,520	4.6	3.5	0.53	1.47	396	234	12.3	100	24.1	28.9	14.2	11.6	12%	88%
	in	5.2 km	25	43.0	11.2	483	265	701	2.2	3.5	0.24	1.09	672	344	18.8	251	17.4	22.6	18.2	13.7	14%	86%
Escobedo x Ahumada TU11	out	4.8 km	21	31.0	36.4	1,129	773	1,485	7.6	5.2	0.60	1.66	280	172	11.0	101	22.7	34.4	13.2	8.4	14%	86%
	in	4.7 km	21	31.0	13.3	412	154	670	2.8	5.2	0.21	3.33	551	293	18.5	1151	21.3	36.7	14.0	7.7	12%	88%
Piedrera x Velarde TU12	out	4.0 km	11	13.5	6.1	82	12	152	1.5	3.2	0.11	0.47	948	397	11.7	63	13.8	20.0	20.7	11.9	6%	94%
	in	3.5 km	11	13.5	17.7	239	121	357	5.1	3.2	0.31	0.89	331	230	17.0	64	17.4	20.7	12.1	10.0	17%	83%
						38,676	24,555	52,798														

Summary for bus company VALLE DE JUAREZ

		Demand										Performance											
Route	dir	distance	N	bus/day avg	pax/bus avg	pax/day			paxd/kmr avg	paxd/kmr all-way avg	occup rate		stops@mts]		stop time [seg]		travel time [min]		travel speed [k/h]		cruise rate		
						avg	Min	Max			avg	ObsMax	dist	distMin	avg	ObsMax	avg	obsMax	avg	obsMin	%stp	%mtn	
Km 20	VJ01	out	22.0 km	6	16.0	55.0	880	342	1,418	2.5	3.1	0.56	1.14	609	441	27.1	620	75.8	88.8	17.8	14.9	22%	78%
		in	22.3 km	6	16.0	84.3	1,349	765	1,934	3.8		0.67	1.88	510	447	28.1	263	84.8	94.7	15.9	14.2	24%	76%
Tierra Nueva	VJ04	out	28.9 km	5	3.5	37.0	130	25	234	1.3	1.4	0.29	0.92	849	589	15.8	250	80.8	103.4	22.2	16.7	11%	89%
		in	28.1 km	5	3.5	43.6	153	108	198	1.6		0.36	0.86	831	685	14.2	165	77.8	85.0	21.9	19.8	10%	90%
Zaragoza	VJ05	out	27.4 km	5	8.0	61.4	491	182	800	2.2	2.6	0.50	1.21	628	421	16.1	216	80.2	99.4	21.3	16.5	15%	85%
		in	26.9 km	5	8.0	78.2	626	187	1,064	2.9		0.74	1.97	669	379	23.4	265	80.2	98.6	20.7	16.4	20%	80%
Km 14	VJ06	out	17.7 km	8	19.5	56.8	1,107	409	1,805	3.2	3.5	0.50	1.72	418	257	20.4	220	73.6	93.1	14.8	11.4	20%	80%
		in	17.4 km	7	19.5	66.1	1,290	632	1,948	3.8		0.61	1.71	388	271	19.4	327	76.9	94.7	13.9	11.0	19%	81%
Km 18	VJ07	out	22.4 km	8	18.5	58.5	1,082	657	1,507	2.6	2.6	0.45	1.19	467	361	13.4	250	75.7	86.9	18.0	15.4	14%	86%
		in	22.0 km	8	18.5	56.8	1,050	765	1,335	2.6		0.46	1.28	527	408	14.1	155	78.0	91.2	17.1	14.5	13%	87%
							8,157	4,071	12,243														