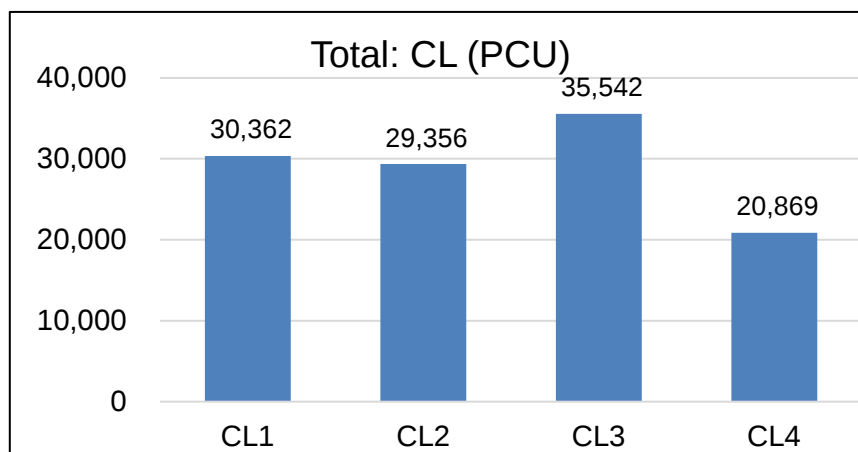


資料-3 交通量調査

1. 交通量調査の分析

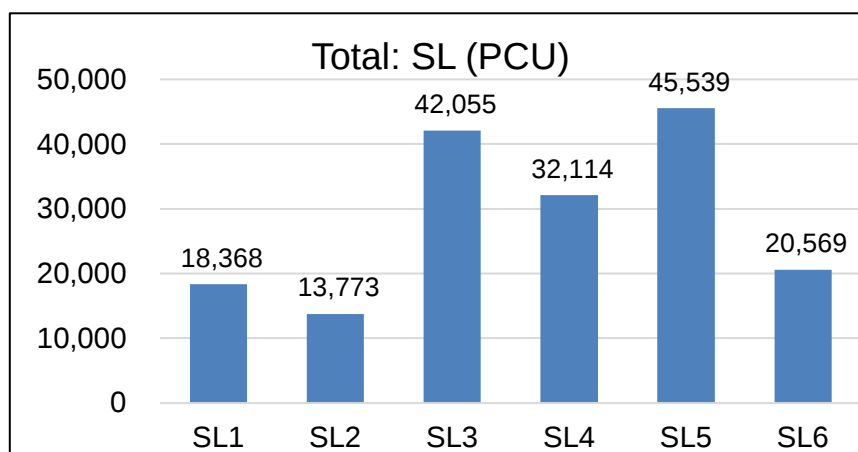
(1) 交通量調査

各交通量調査結果概要を図 3.1～図 3.3 に示す。交通量調査の結果、ルサカ都市圏内外の交通は大幅に増加しているが、ルサカ市を南北に縦断する鉄道を境界とした東西の交通量には大きな変化はなかった。また、ルサカ市中心部への交通は特に Lumumba Road の交通量が多い結果となった。



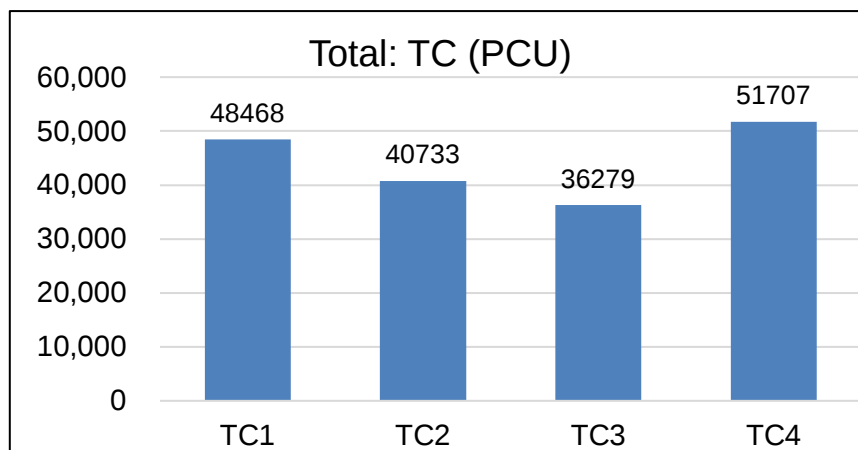
出典：JICA 調査団

図 3.1 コードンライン調査結果概要(PCU) (24 時間補正後)



出典：JICA 調査団

図 3.2 スクリーンライン調査結果概要(PCU) (24 時間補正後)



出典：JICA 調査団

図 3.3 市内断面交通量調査結果概要(PCU)(24 時間補正後)

本調査で用いた乗用車換算係数を表 3.1 に示す。調査結果解析では、11 車種分類を、Car（乗用車、タクシー、軽貨物車、2 輪車）、Bus（ミニバス、中型バス、大型バス）、Truck（中型貨物車、大型貨物車）の 3 つに分類した。NMT（歩行者や自転車）とその他車両は別集計とする。

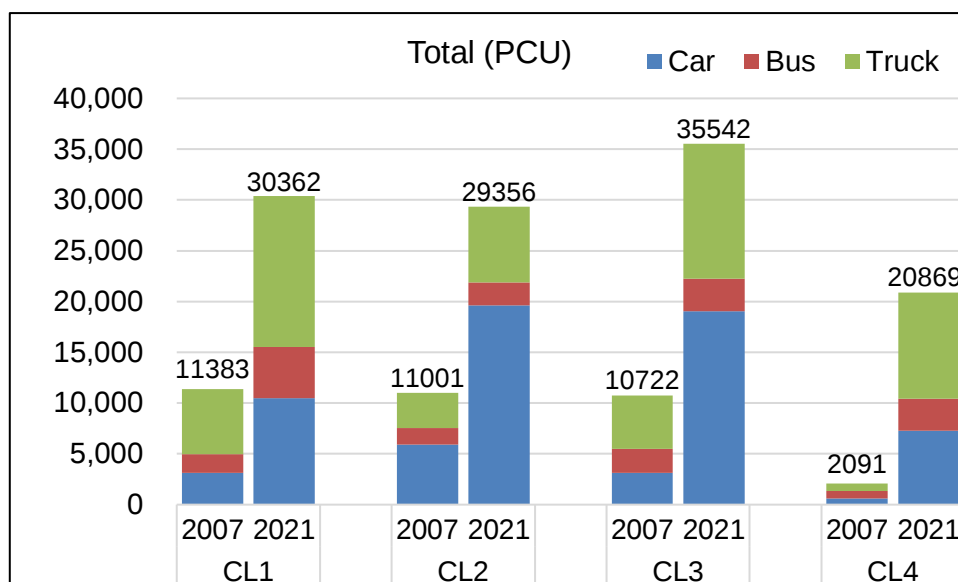
表 3.1 乗用車換算係数

	車種分類	乗用車換算係数		車種分類	乗用車換算係数
1	乗用車	1.0	7	中型貨物車（2 軸）	3.0
2	タクシー	1.0	8	大型貨物車（3 軸以上）	4.5
3	ミニバス	1.5	9	2 輪車	0.5
4	中型バス	2.0	10	NMT	0.5（自転車）
5	大型バス	3.0	11	その他	—
6	軽貨物車	1.5			

1) コードンライン調査

各調査地点（4 地点）の交通量（PCU）を図 3.4 に示す。また、各調査地点での 2007 年からの年平均増加率を表 3.2 に示す。

全ての調査地点において 3 倍～10 倍ほどの交通量となっており、7%以上の年平均増加率となっている。特にルサカ市西方の CL4 において 17%を超える年平均増加率となっている。全体的に Bus の増加率が低く、Car の増加が顕著である。



出典：JICA 調査団

図 3.4 コードンライン交通量(PCU) (24 時間補正後)

表 3.2 コードンライン交通量年平均増加率(PCU) (24 時間補正後)

2007->2021	Overall	Car	Bus	Truck
CL1	7.3%	9.0%	7.5%	6.2%
CL2	7.2%	8.9%	2.5%	5.6%
CL3	8.9%	13.7%	2.3%	6.9%
CL4	17.9%	19.4%	11.0%	20.6%

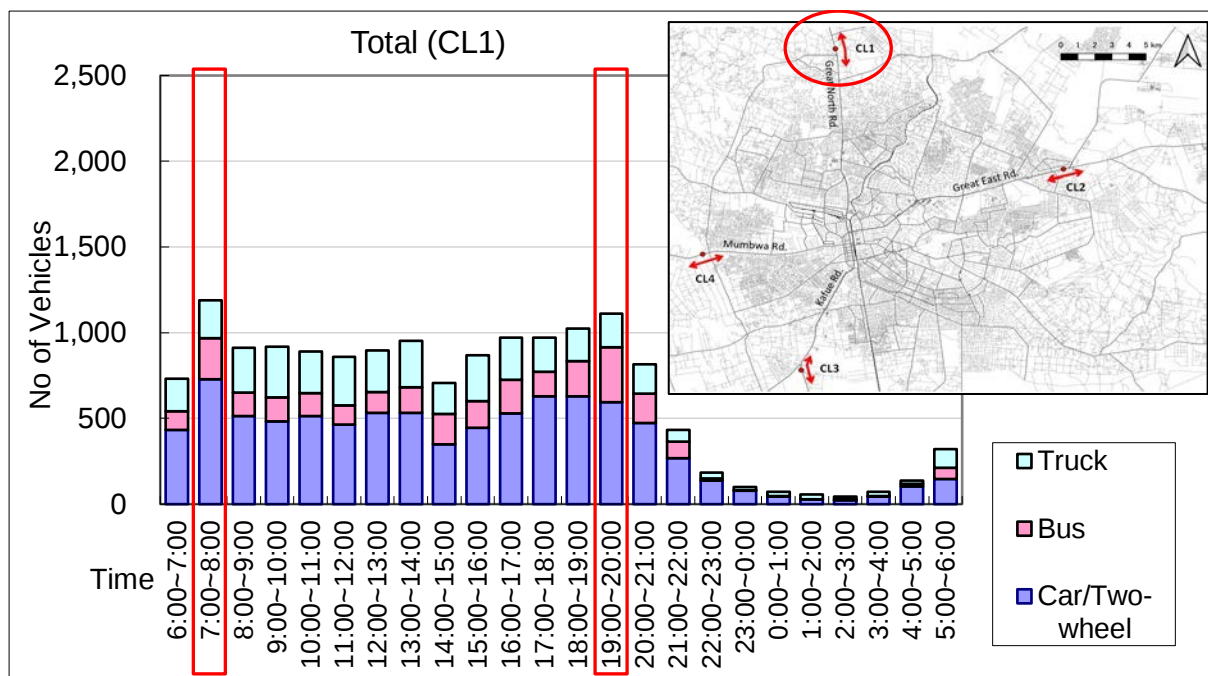
出典：JICA 調査団

a) 時間別交通量

コードンライン調査地点別の時間別交通量を図 3.5～図 3.8 に示す。また、方向別の交通量時間構成比を図 3.9～図 3.12 に示す。

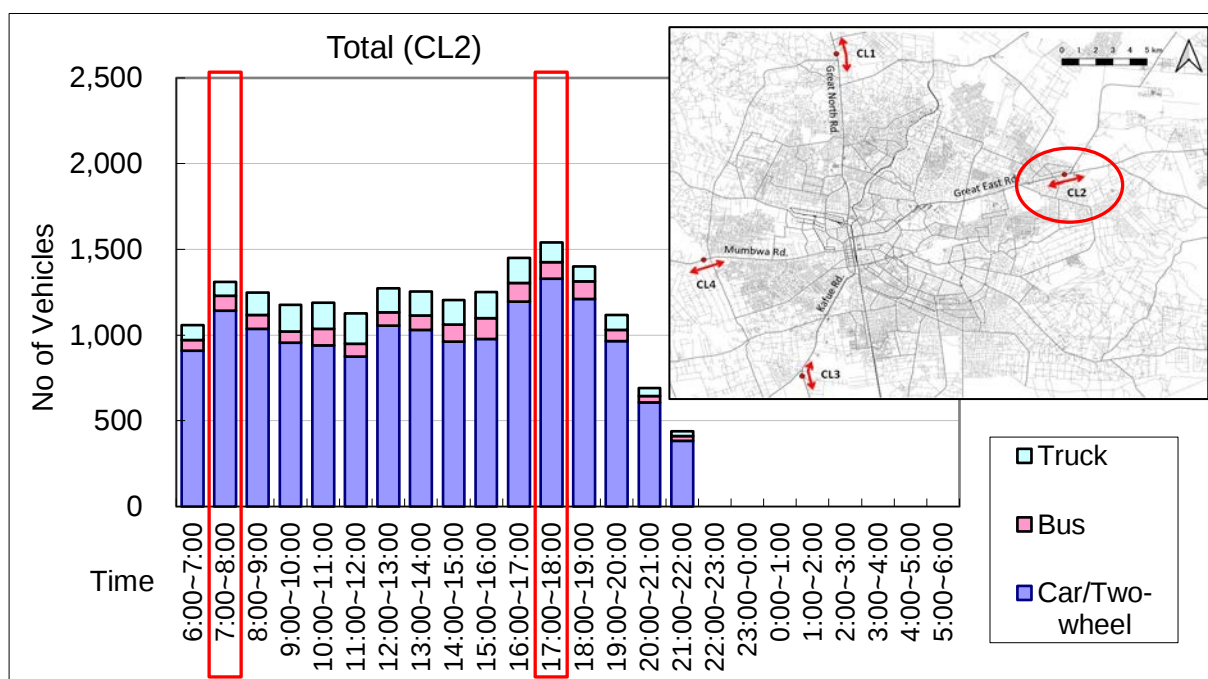
各地点の時間別交通量によると、双方向では、朝のピークは 7 時台、夕方のピークは 17 時台、19 時台となっている。流入方向別に見ても、朝 7 時台付近に流入方向のピークがあり、夕方 17 時台付近に流出方向のピークがあることがわかる。

ルサカ市南方の CL3 の朝の時間帯において、高い交通量を観測しており、ルサカ市に流入する交通の 16%近くがこの時間帯に集中している。その他の地点では 9~11%ほどのピーク率を観測している。



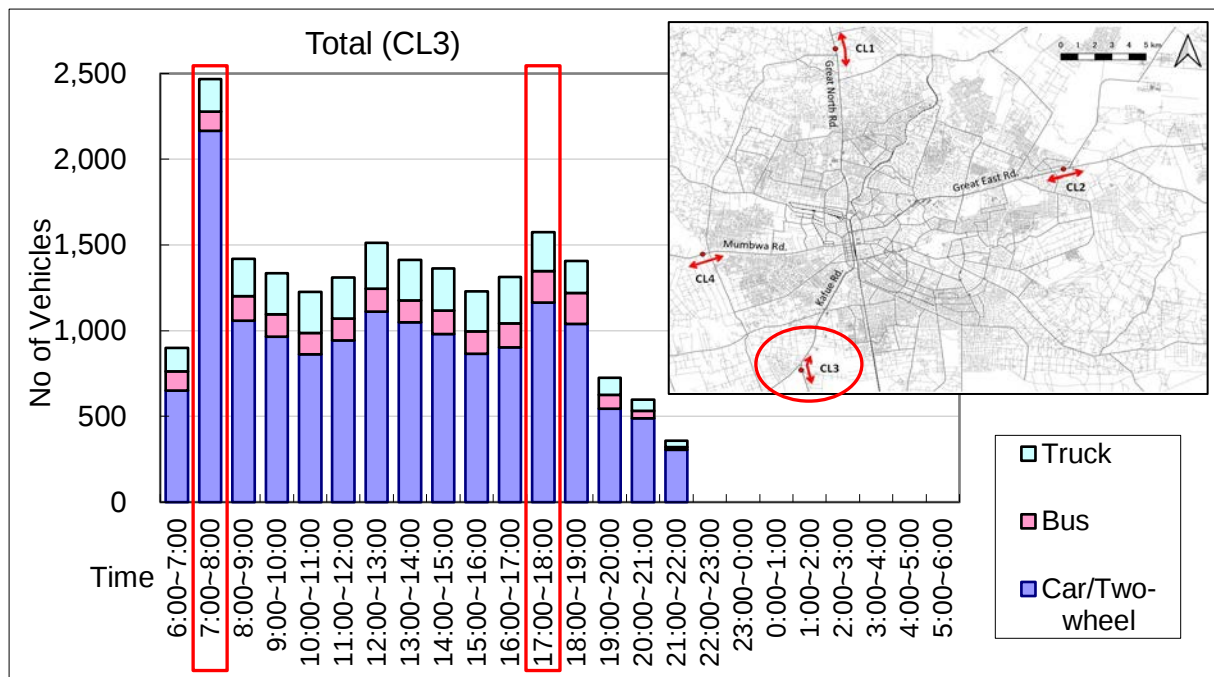
出典：JICA 調査団

図 3.5 コードンライン時間別交通量(CL1)



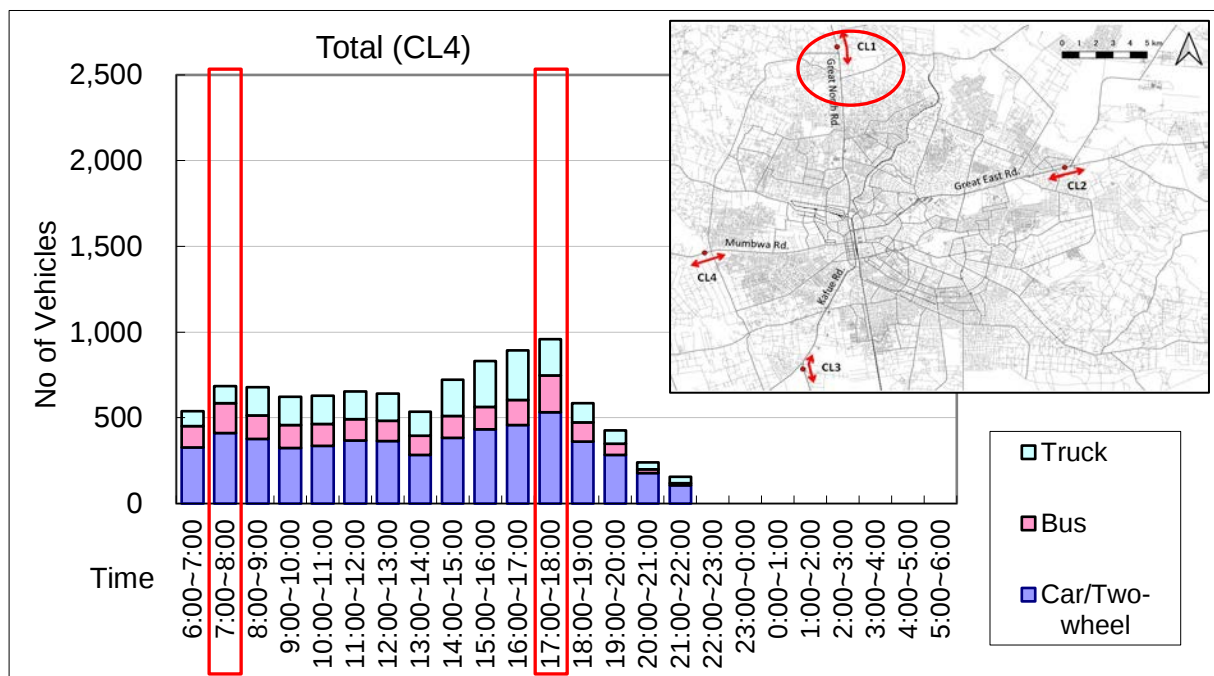
出典：JICA 調査団

図 3.6 コードンライン時間別交通量(CL2)



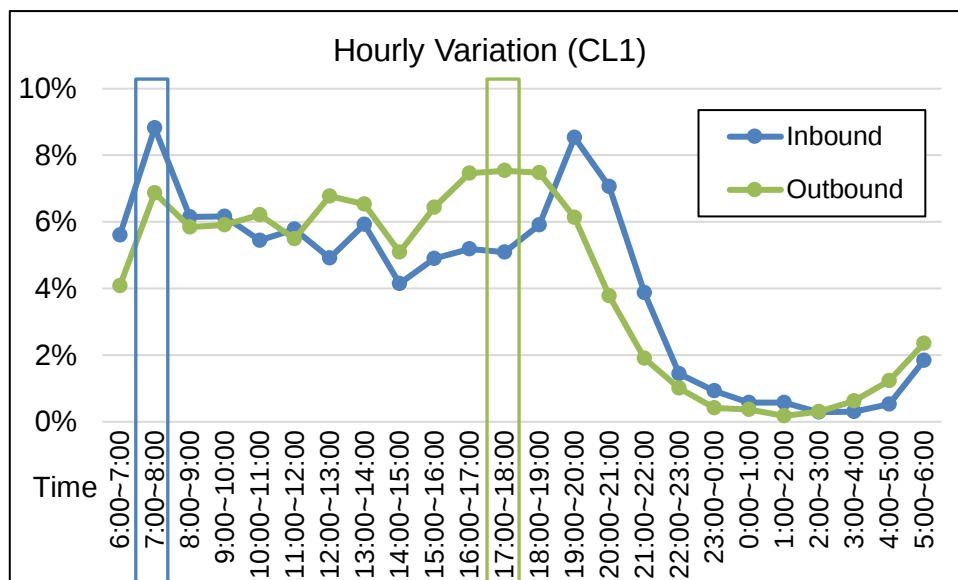
出典：JICA 調査団

図 3.7 コードンライン時間別交通量(CL3)



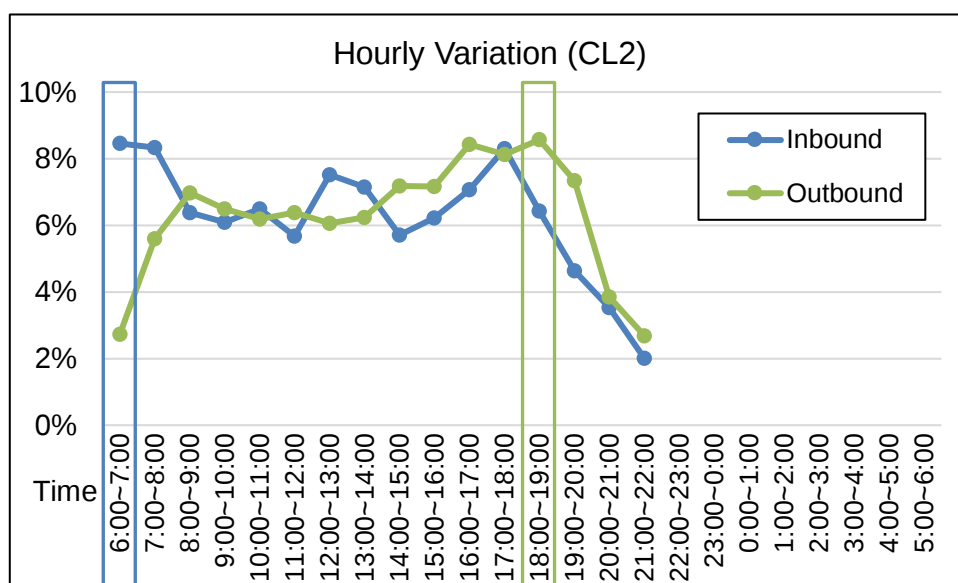
出典：JICA 調査団

図 3.8 コードンライン時間別交通量(CL4)



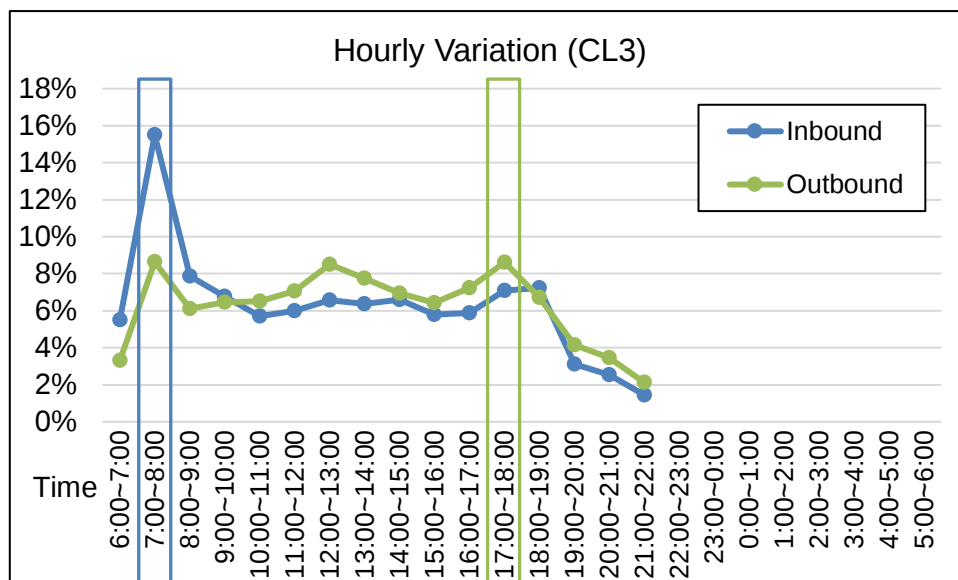
出典：JICA 調査団

図 3.9 コードンライン交通量時間構成率(CL1)



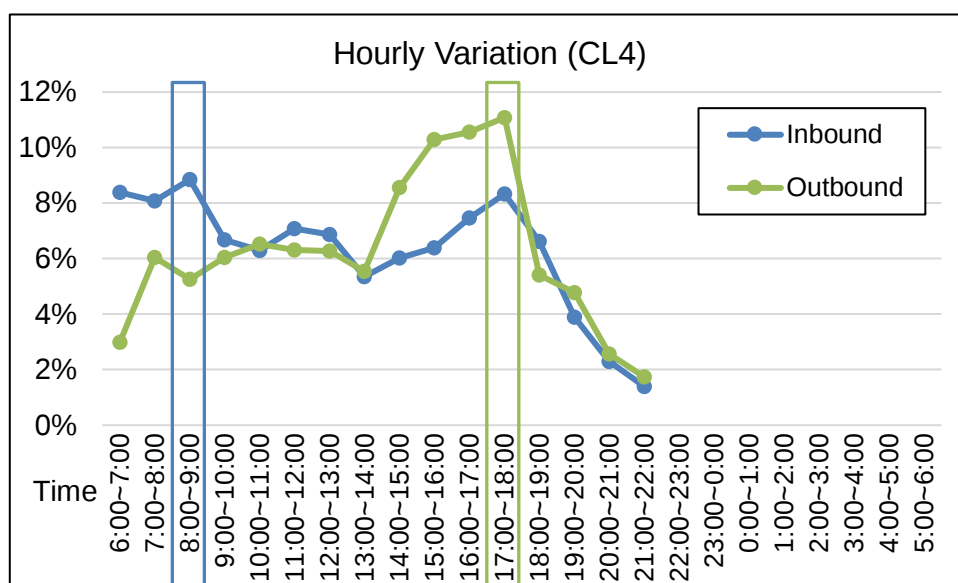
出典：JICA 調査団

図 3.10 コードンライン交通量時間構成率(CL2)



出典：JICA 調査団

図 3.11 コードンライン交通量時間構成率(CL3)



出典：JICA 調査団

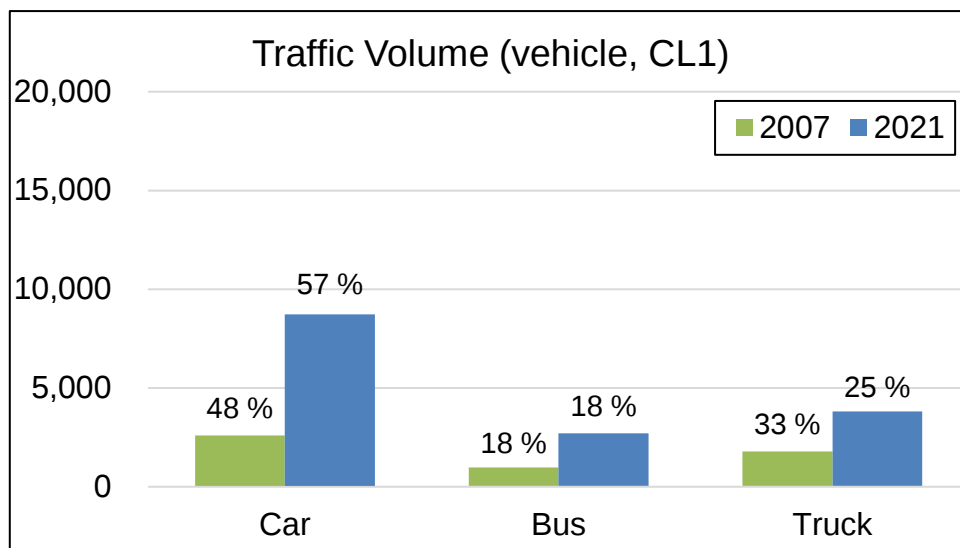
図 3.12 コードンライン交通量時間構成率(CL4)

b) 車種別交通量

車種別交通量を図 3.13～図 3.16 に示す。

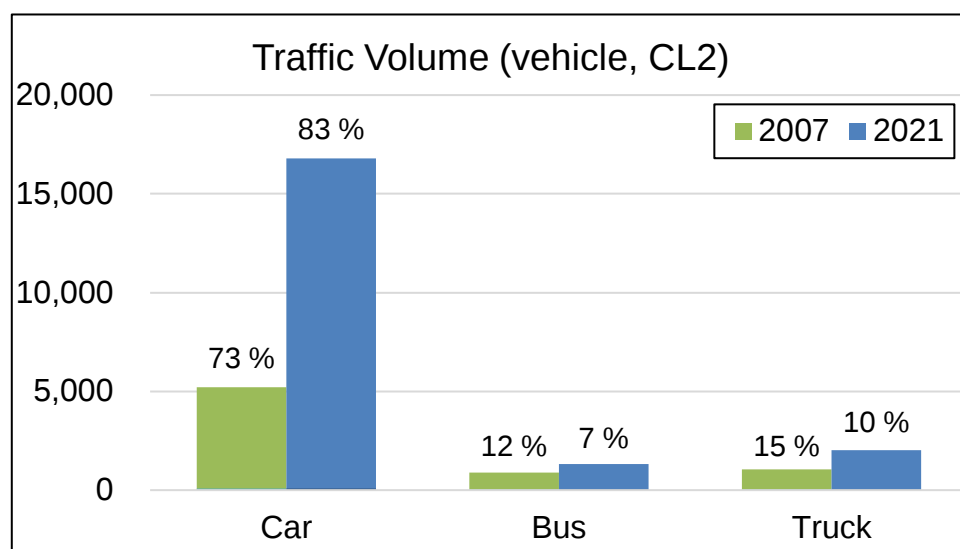
全体の傾向として、2007 年調査結果と比較して Car の比率が上がっており、Bus や Truck の比率が下がっている。

ルサカ市北方の CL1 は Bus や Truck の比率が高く、台数は CL2 や CL3 と比較して少ないが、PCU では同程度の交通量となっている。また、ルサカ市西方の CL4 も CL1 と同様に Bus や Truck の比率が高い傾向にある。



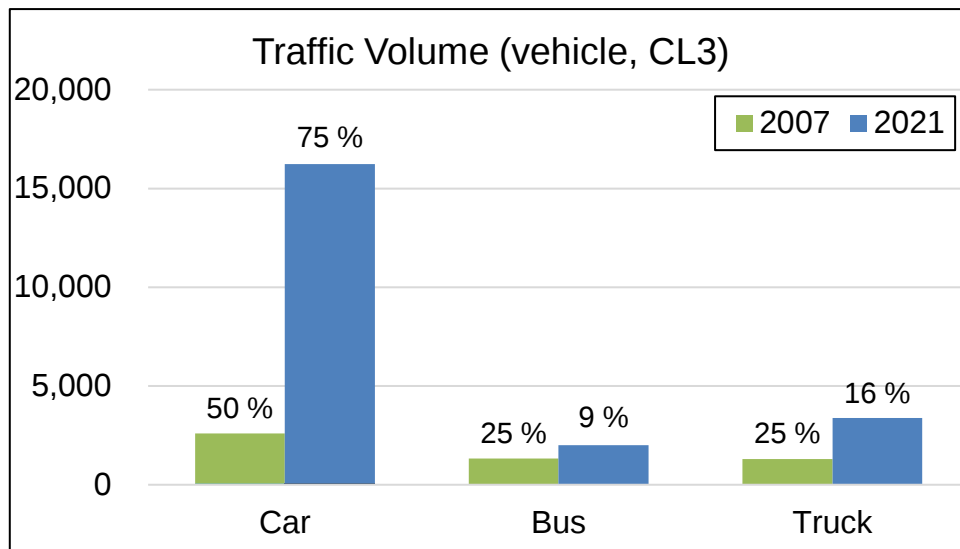
出典：JICA 調査団

図 3.13 コードンライン車種別交通量(CL1)



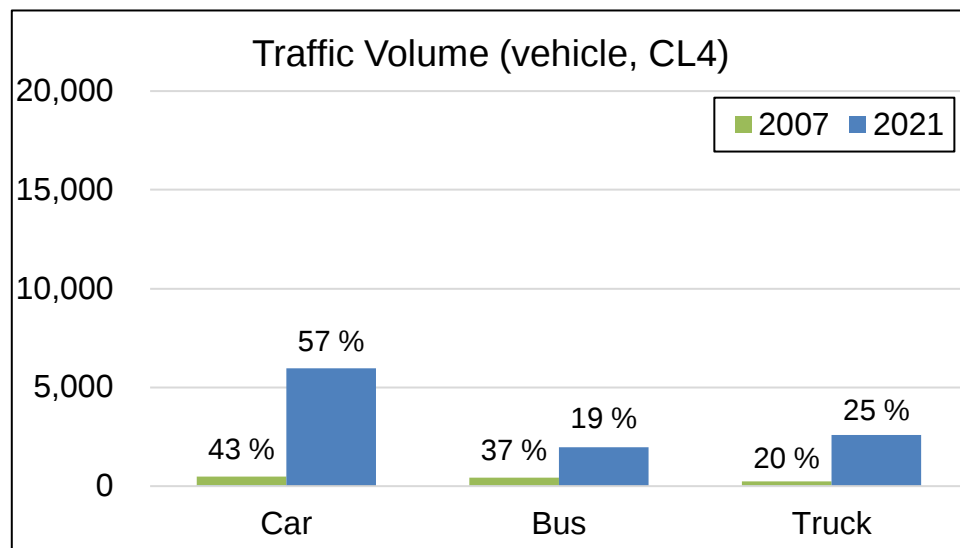
出典：JICA 調査団

図 3.14 コードンライン車種別交通量(CL2)(24 時間補正後)



出典：JICA 調査団

図 3.15 コードンライン車種別交通量(CL3) (24 時間補正後)



出典：JICA 調査団

図 3.16 コードンライン車種別交通量(CL4) (24 時間補正後)

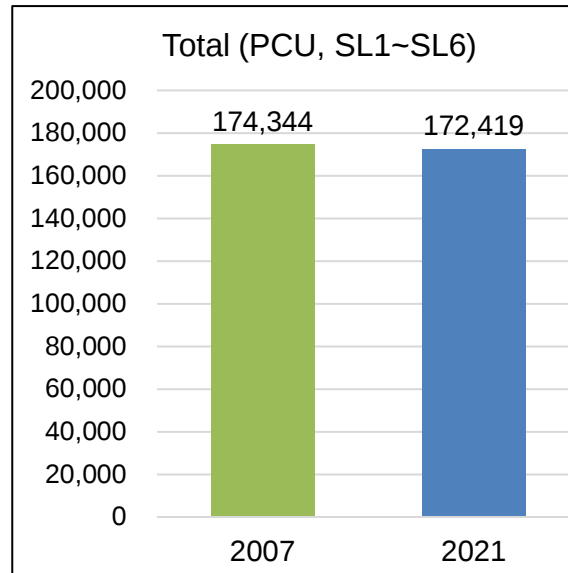
2) スクリーンライン調査

スクリーンライン調査の全地点合計の交通量を図 3.17 に示し、地点別の交通量を図 3.18 に示す。また、各調査地点での 2007 年からの年平均増加率を表 3.3 に示す。

ルサカ市を南北に縦断する鉄道を断面とした総交通量は前回 2007 年から横ばいとなっている。

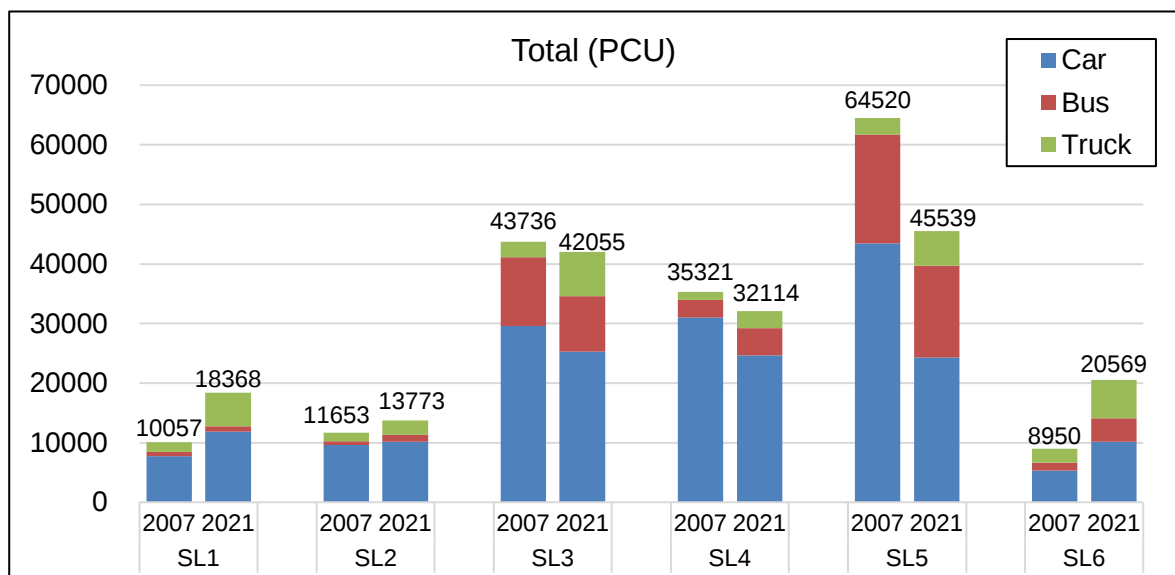
地点ごとに見ると、2007 年に交通量の多い SL3、SL4、SL5 で交通量が減少し、もともと交通量の少ない SL1、SL2、SL6 では増加している傾向がある。中でも 2007 年に最も交通量の多かった SL5 では 2 万 PCU 近く減少している。

車種別に見ると、Car や Bus は増加率がマイナスの地点があるが、Truck の増加率だけは全ての地点で増加している。



出典：JICA 調査団

図 3.17 スクリーンライン全体交通量(PCU) (24 時間補正後)



出典：JICA 調査団

図 3.18 スクリーンライン交通量(PCU) (24 時間補正後)

表 3.3 スクリーンライン交通量年平均増加率(PCU) (24 時間補正後)

2007->2021	Overall	Car	Bus	Truck
SL1	4.4%	3.1%	1.7%	9.2%
SL2	1.2%	0.4%	4.1%	4.0%
SL3	-0.3%	-1.1%	-1.5%	7.8%
SL4	-0.7%	-1.6%	3.0%	5.7%
SL5	-2.5%	-4.1%	-1.2%	5.5%
SL6	6.1%	4.7%	8.0%	7.7%

出典：JICA 調査団

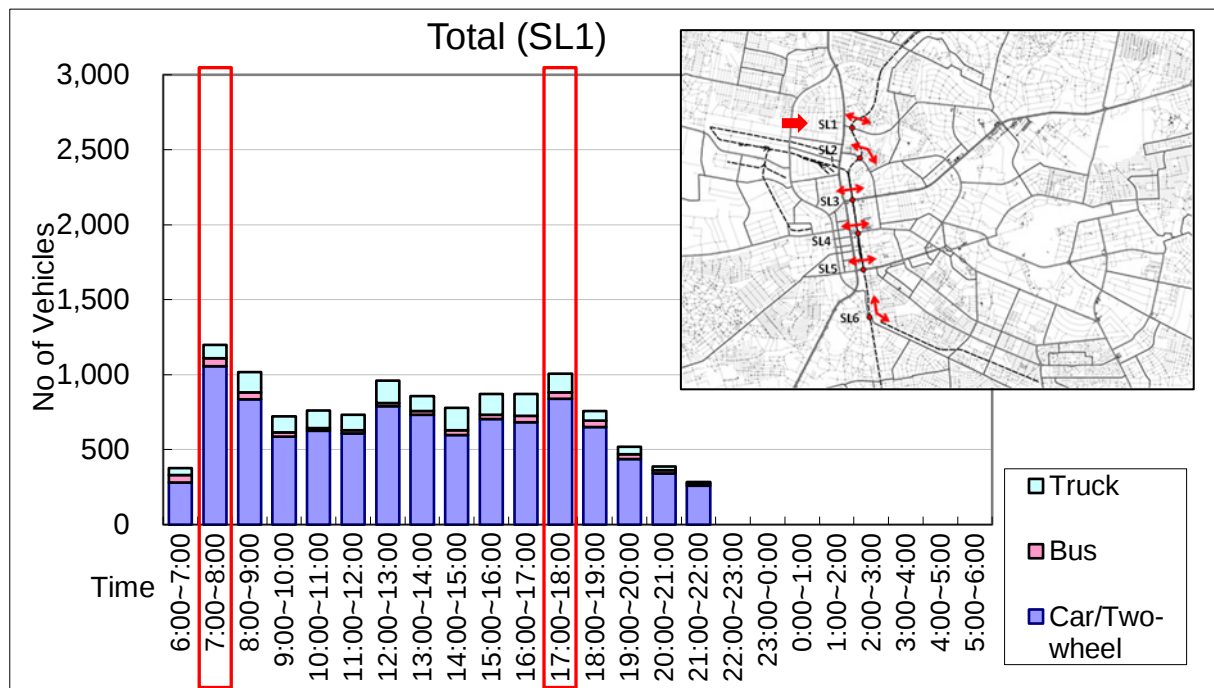
a) 時間別交通量

地点ごとの時間別交通量を図 3.19～図 3.24 に示す。また、交通量の時間構成比を図 3.25～図 3.30 に示す。

時間別交通量を見ると朝の 7 時台や夕方の 17 時台の近くにピークが観測されているが、コードンライン調査結果よりもピークが明確でなく、特に朝のピーク時間帯が調査地点ごとに異なる傾向がある。明確なピークを持たない地点も複数確認できる。

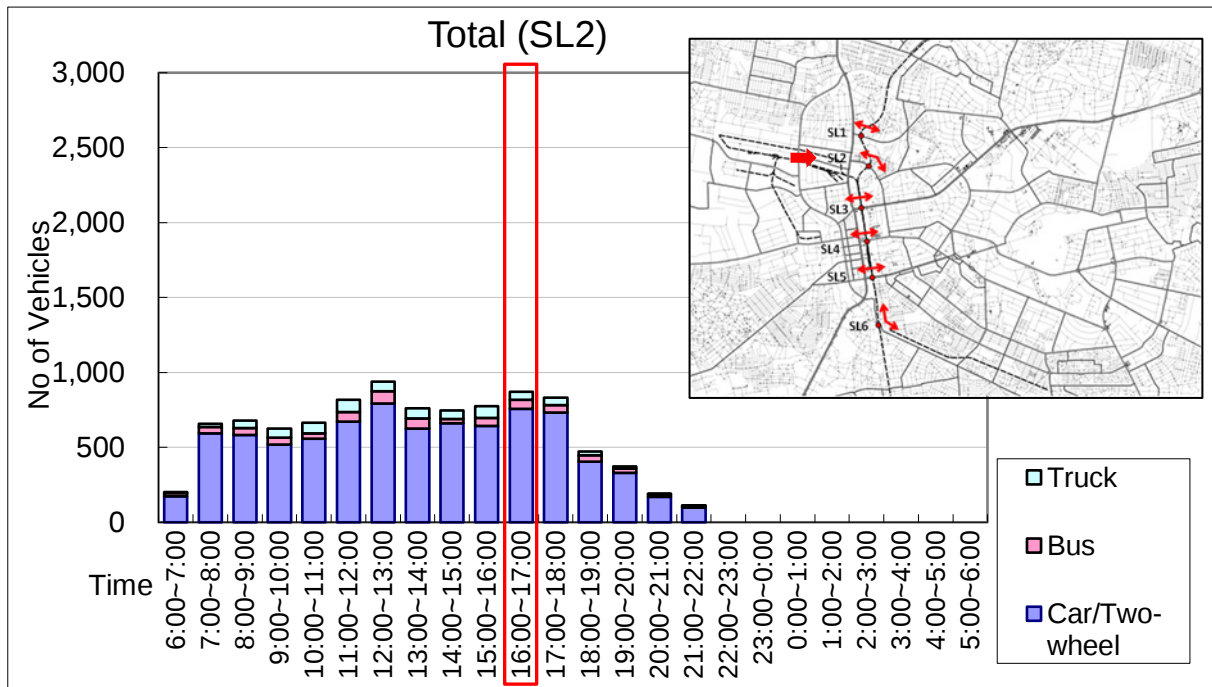
方向別時間構成比によると、北側の 2 地点（SL1、SL2）は朝に東向きの交通が多く、夕方に西向きの交通が多い結果であるが、その他南側 4 地点は逆に、朝は西向きの交通が多く、夕方は東向きの交通が多い結果となっている。

また、各地点のピーク率は 10~12%ほどであるが、Kafue Road から Tokyo Way に続く SL6 の夕方のピーク率は 21%を超えており、非常に高くなっている。



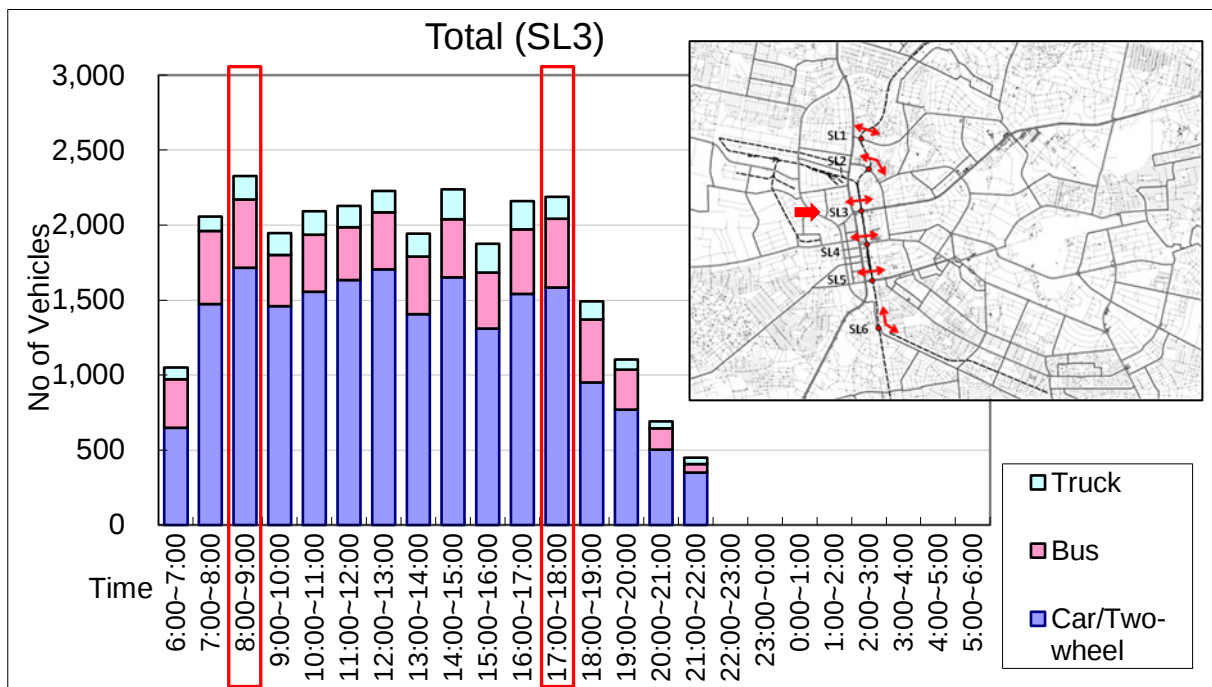
出典：JICA 調査団

図 3.19 スクリーンライン時間別交通量(SL1)



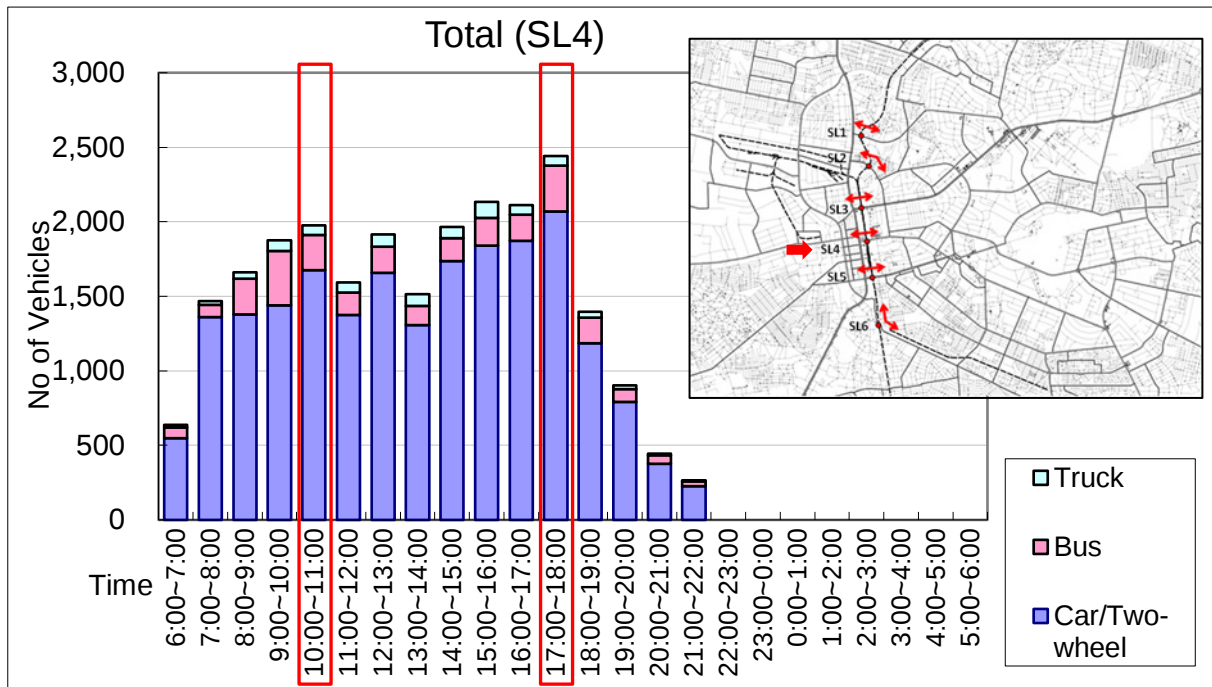
出典：JICA 調査団

図 3.20 スクリーンライン時間別交通量(SL2)



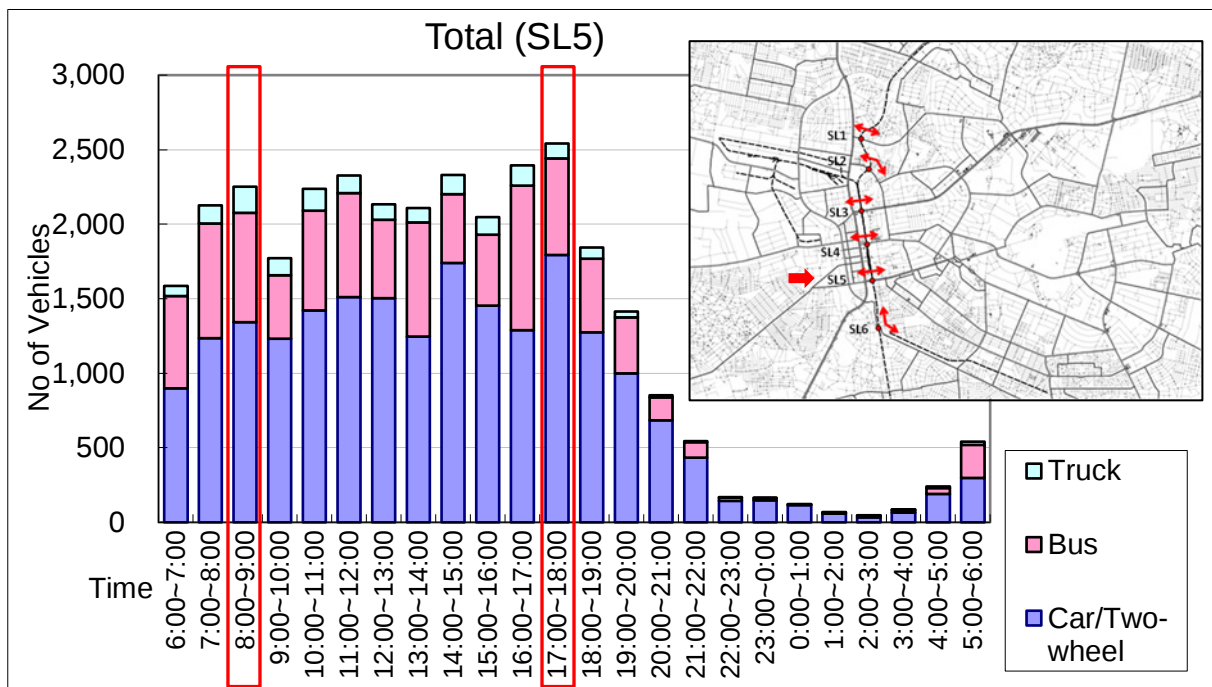
出典：JICA 調査団

図 3.21 スクリーンライン時間別交通量(SL3)



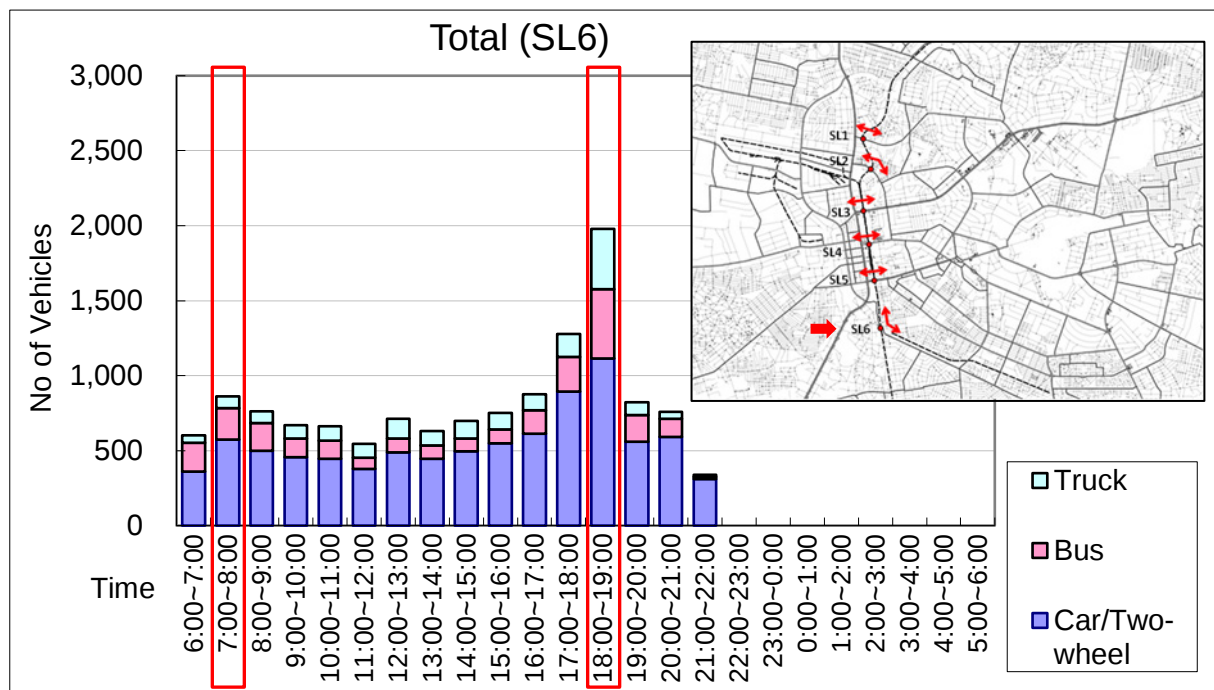
出典：JICA 調査団

図 3.22 スクリーンライン時間別交通量(SL4)



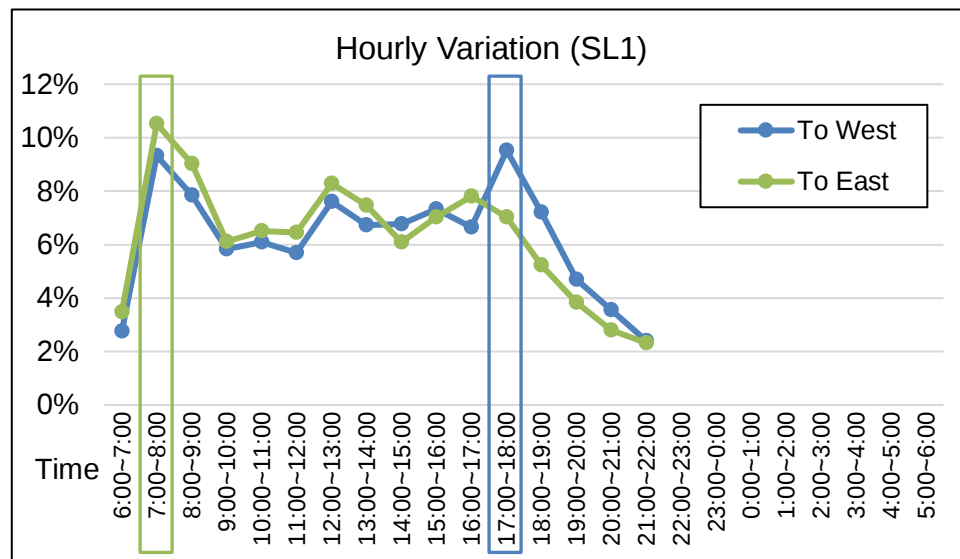
出典：JICA 調査団

図 3.23 スクリーンライン時間別交通量(SL5)



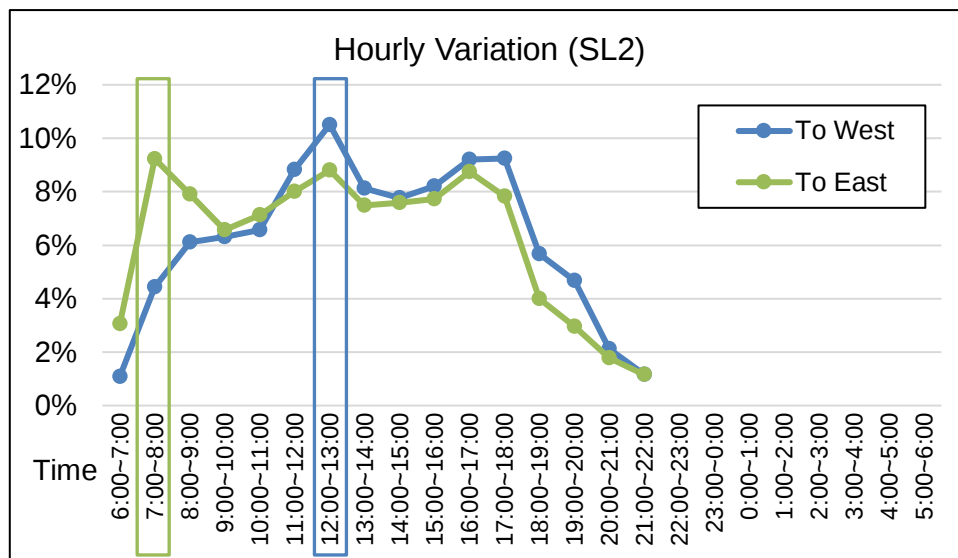
出典：JICA 調査団

図 3.24 スクリーンライン時間別交通量(SL6)



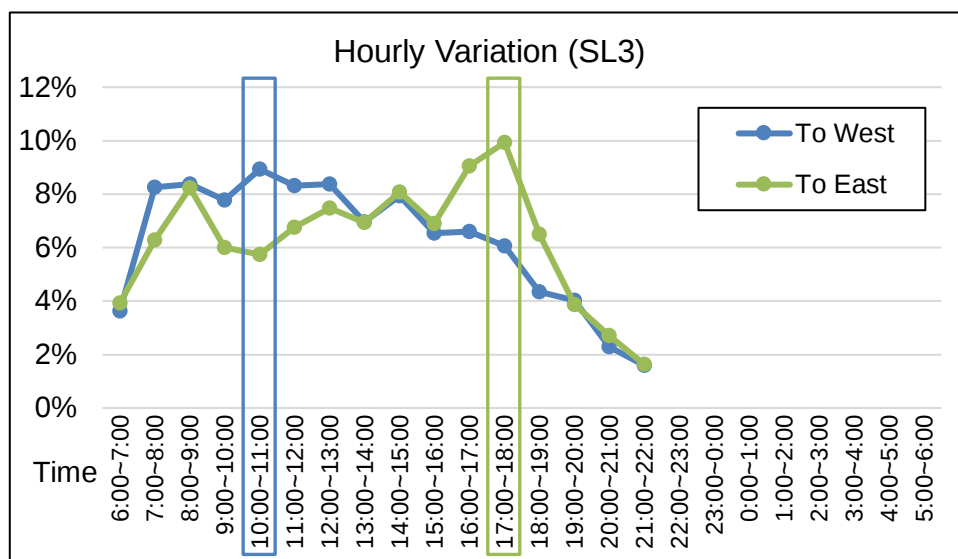
出典：JICA 調査団

図 3.25 スクリーンライン交通量時間構成率(SL1)



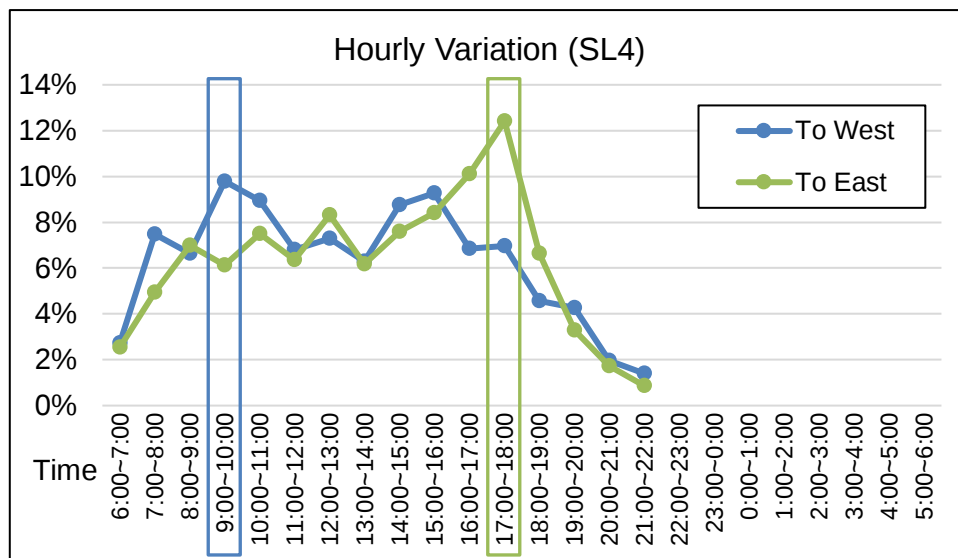
出典：JICA 調査団

図 326 スクリーンライン交通量時間構成率(SL2)



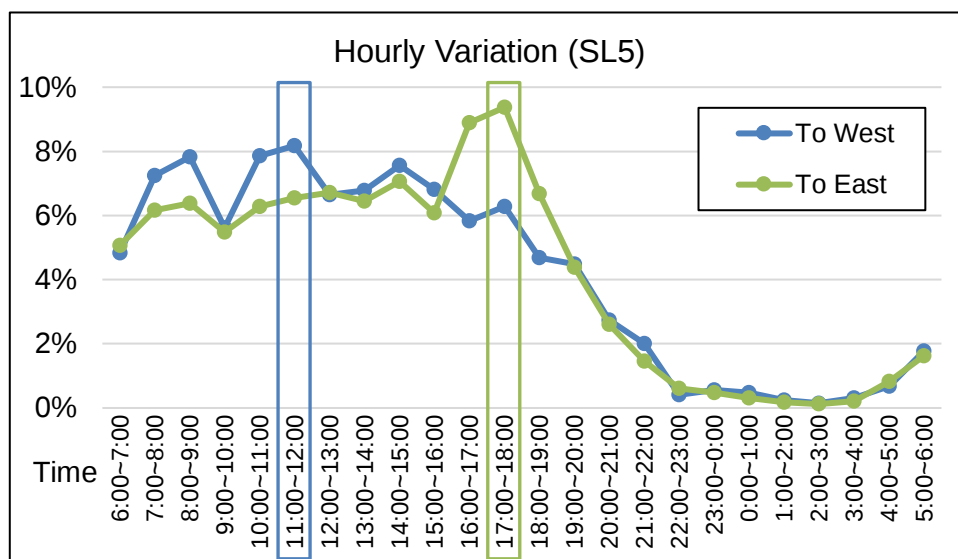
出典：JICA 調査団

図 327 スクリーンライン交通量時間構成率(SL3)



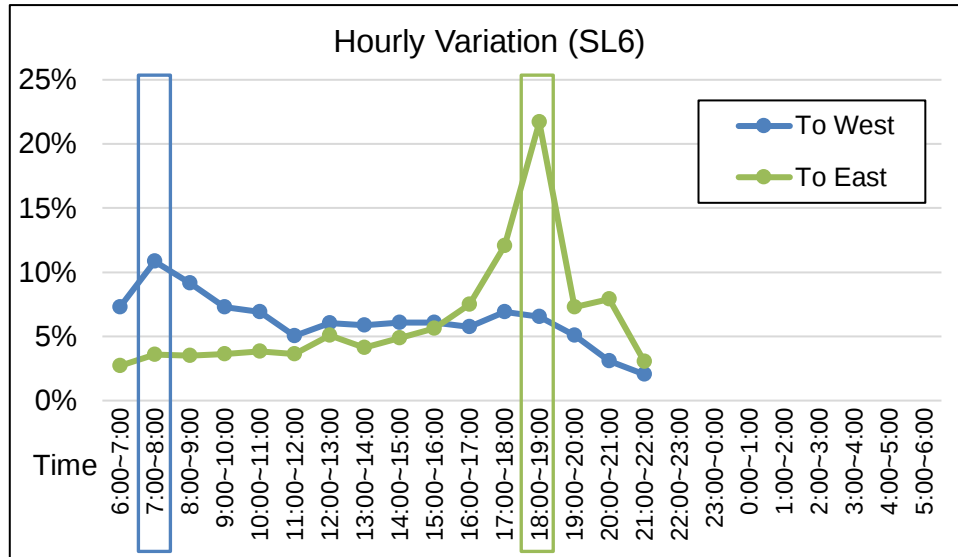
出典：JICA 調査団

図 328 スクリーンライン交通量時間構成率(SL4)



出典：JICA 調査団

図 329 スクリーンライン交通量時間構成率(SL5)



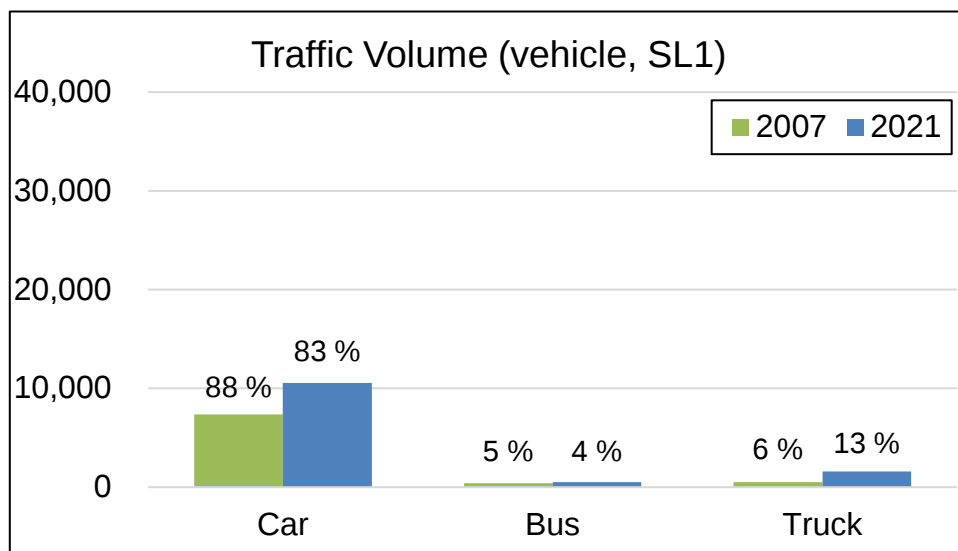
出典：JICA 調査団

図 3.30 スクリーンライン交通量時間構成率(SL6)

b) 車種別交通量

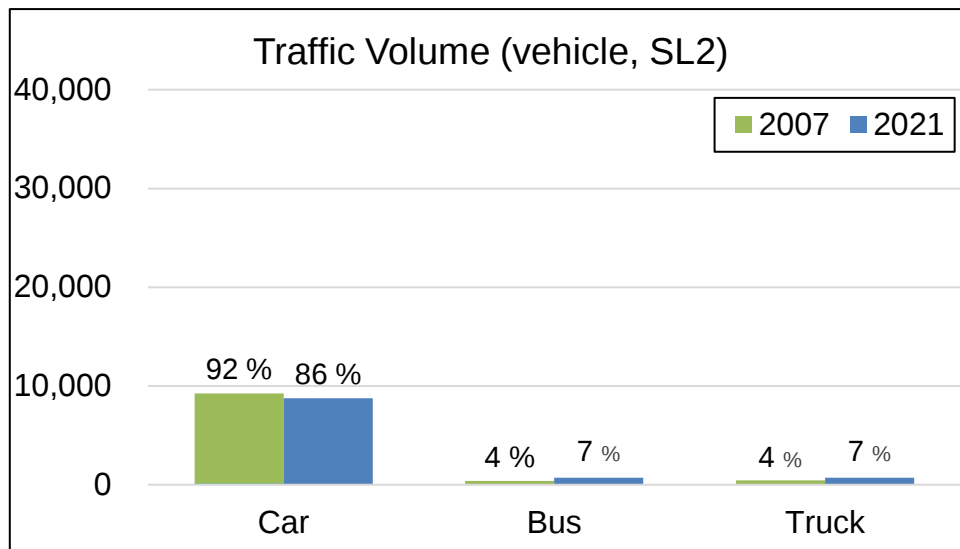
車種別交通量を図 3.31～図 3.36 に示す。

全体的な傾向として、2007 年の調査結果と比較して Car の比率が下がり、Bus や Truck の比率が上がっている。これはコードンライン調査とは逆の傾向である。



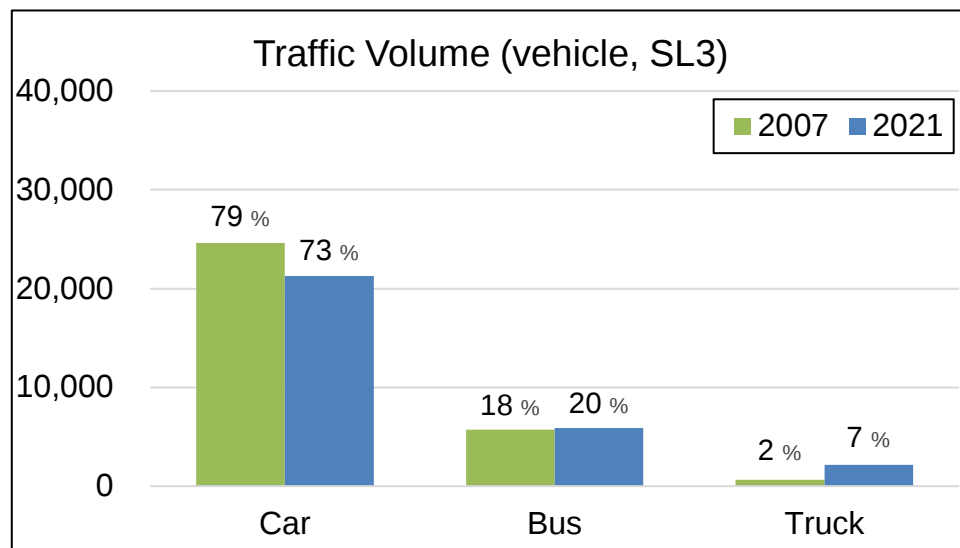
出典：JICA 調査団

図 3.31 スクリーンライン車種別交通量(SL1) (24 時間補正後)



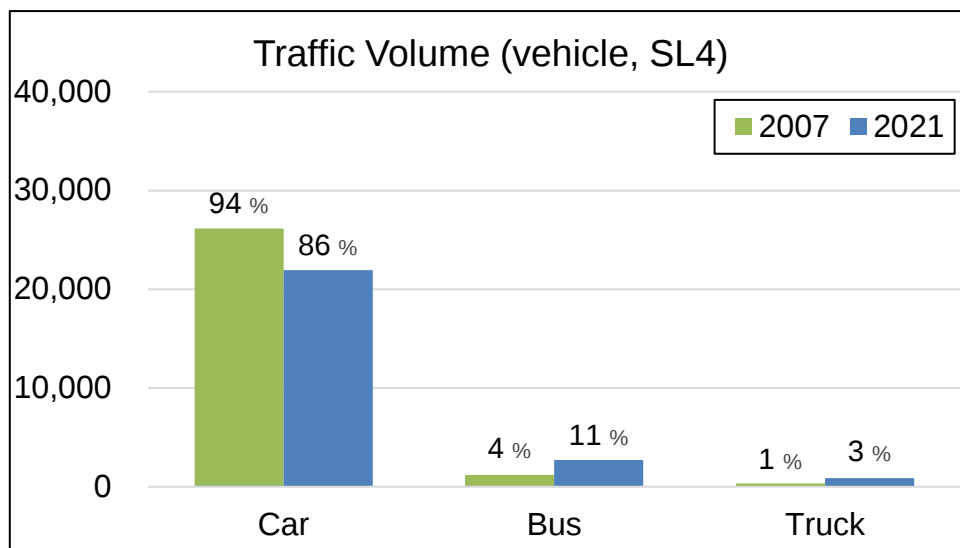
出典：JICA 調査団

図 3.32 スクリーンライン車種別交通量(SL2) (24 時間補正後)



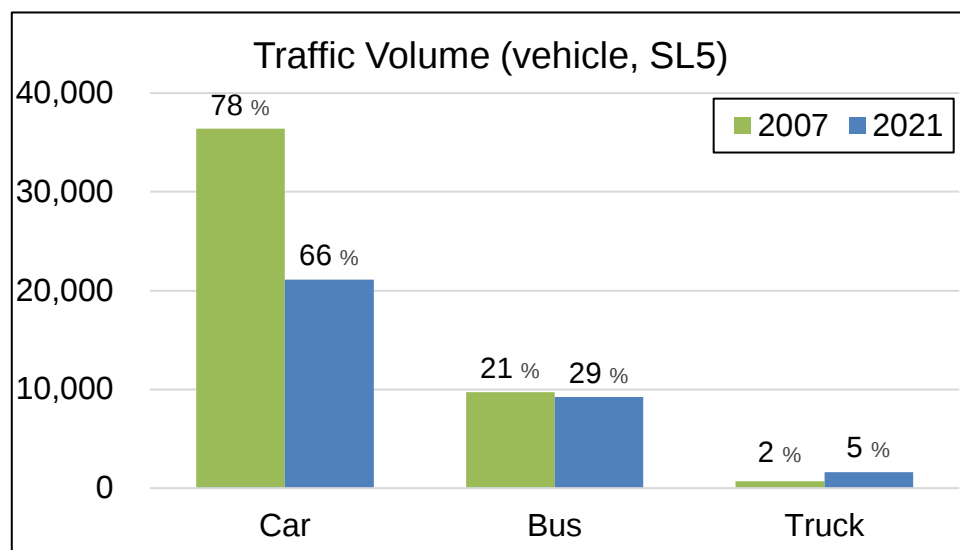
出典：JICA 調査団

図 3.33 スクリーンライン車種別交通量(SL3) (24 時間補正後)



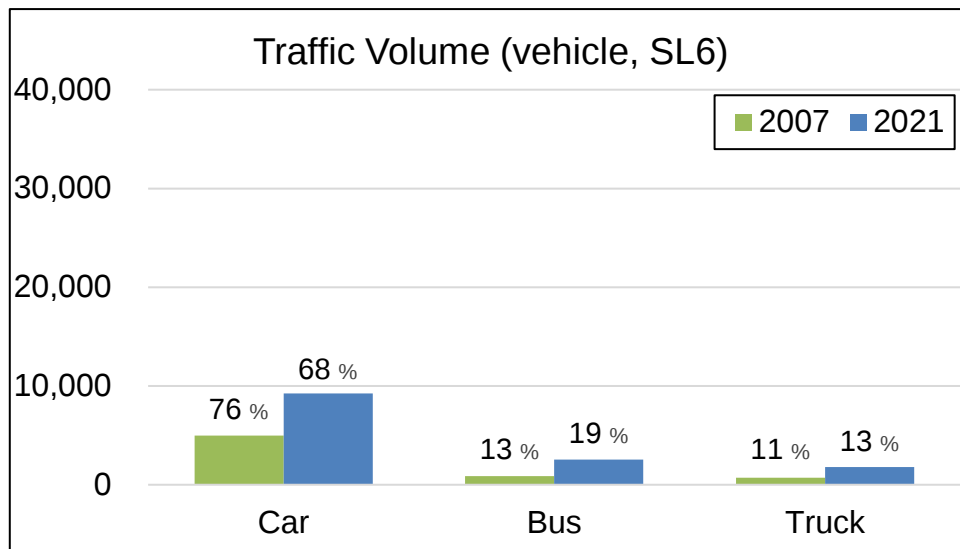
出典：JICA 調査団

図 3.34 スクリーンライン車種別交通量(SL4) (24 時間補正後)



出典：JICA 調査団

図 3.35 スクリーンライン車種別交通量(SL5)



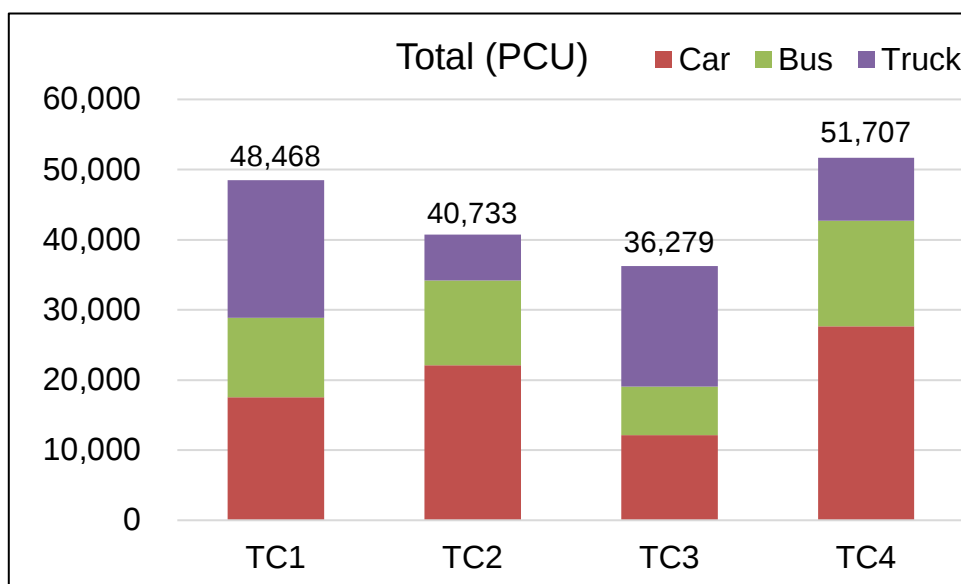
出典：JICA 調査団

図 3.36 スクリーンライン車種別交通量(SL6) (24 時間補正後)

3) 市内断面交通量調査

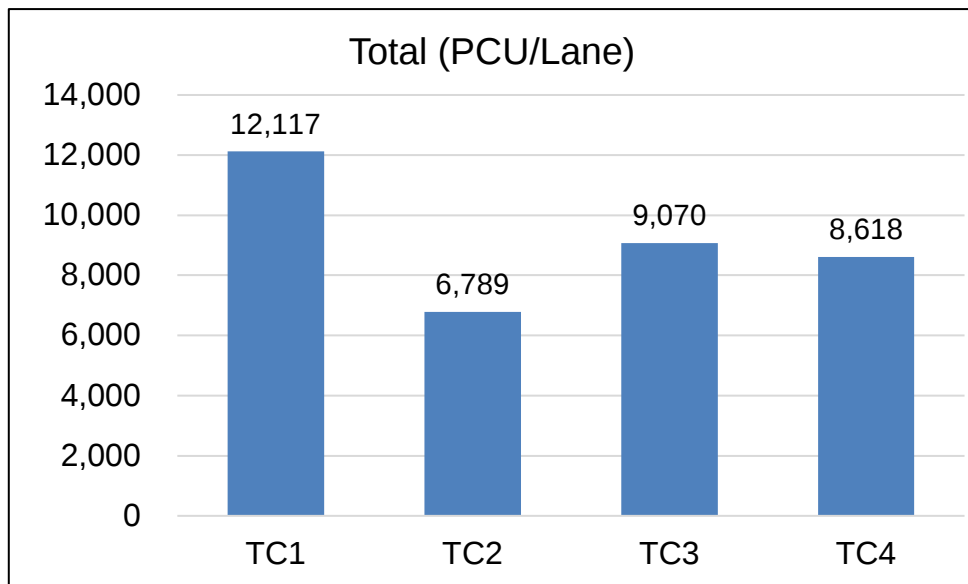
市内断面交通量を図 3.37 に示す。また、1 車線当たり交通量を図 3.38 に示す。

総交通量は Lumumba Road の北側 (TC1) と Kafue Road (TC4) で多い。しかし、1 車線当たりの交通量に換算すると、Lumumba Road (TC1、TC3) の交通量が多く、TC2、TC4 より混雑度が高いことが分かる。



出典：JICA 調査団

図 3.37 ルサカ市内断面交通量(PCU) (24 時間補正後)



出典：JICA 調査団

図 3.38 1車線当たり交通量(PCU) (24 時間補正後)

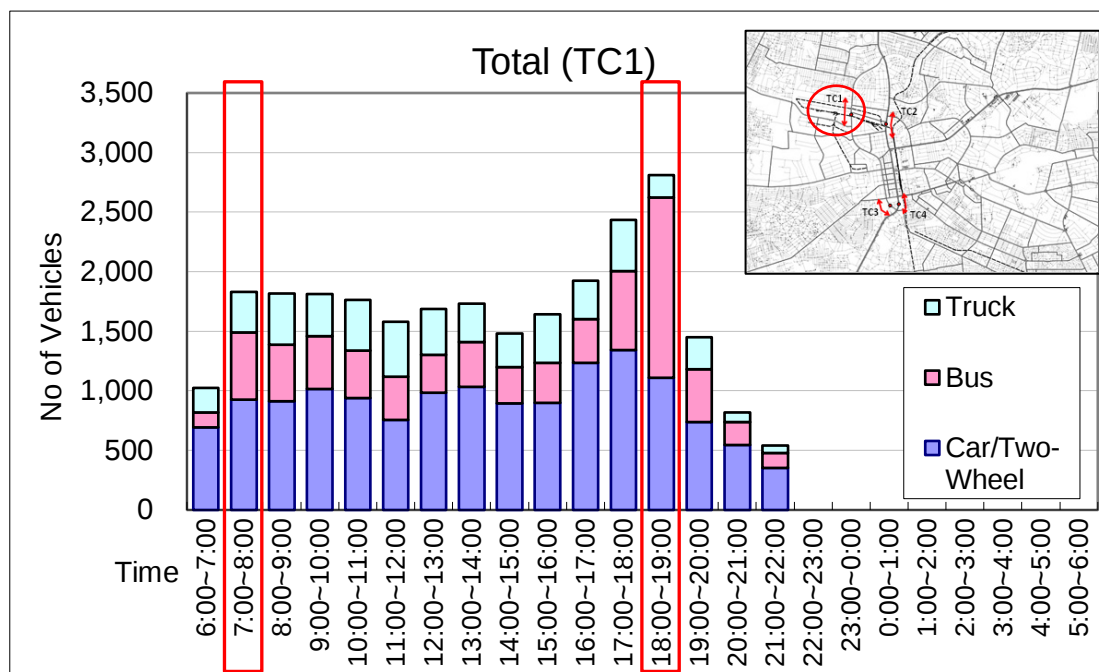
a) 時間別交通量

地点ごとの時間別交通量を図 3.39～図 3.42 に示す。また、交通量の時間構成比を図 3.43～図 3.46 に示す。

朝のピークは概ね 7 時台となっているが、夕方のピークは地点により異なり、16 時台～18 時台となっている。また全体的に午後の交通量が、午前より多いことが分かる。

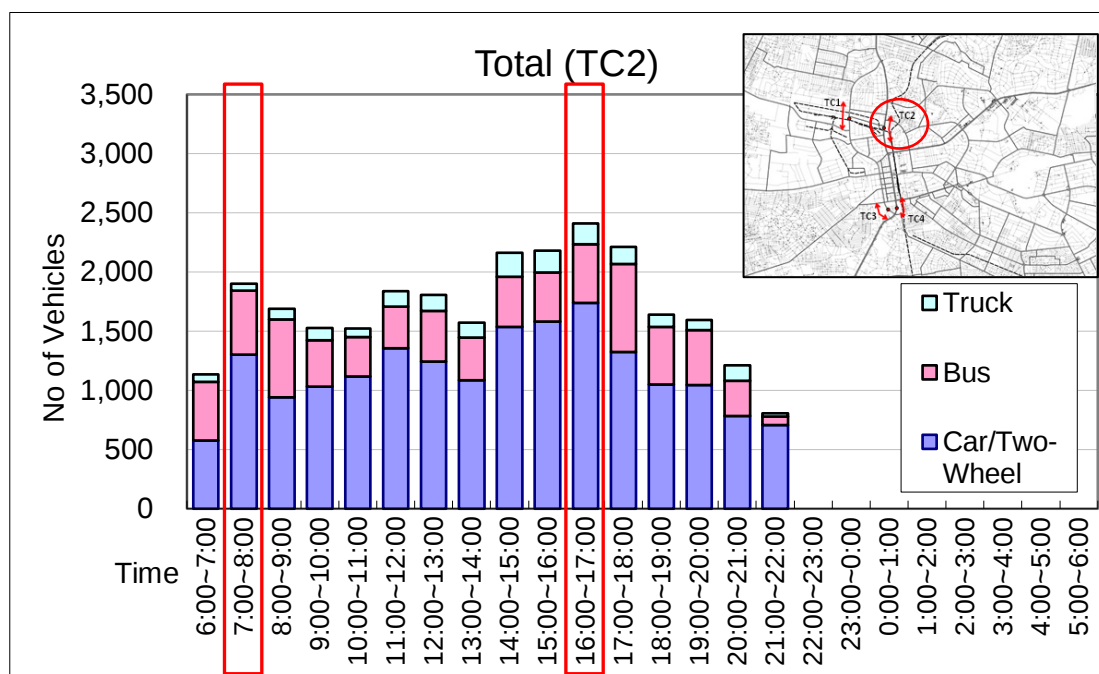
方向別交通量を見ると、Lumumba Road (TC1、TC3) は朝の時間帯は市中心部へ向かう方向へ、夕方の時間帯は郊外の方へ交通が集中しているが、Great North Road (TC2) と Kafue Road (TC4) は午後に双方向ともにピークを迎えている。

全体的にピーク率は 9～11%ほどだが、Lumumba Road の北側 (TC1) では夕方のピーク率が 15%を超えており、特に Bus の交通が集中している。



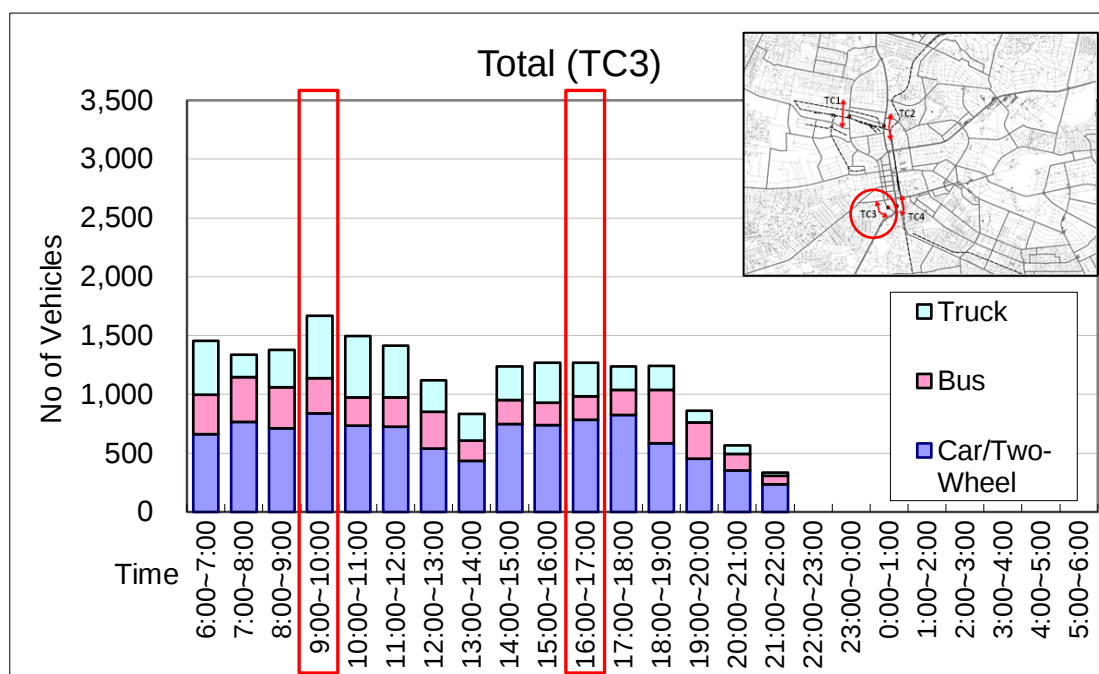
出典：JICA 調査団

図 3.39 ルサカ市内時間別交通量(TC1)



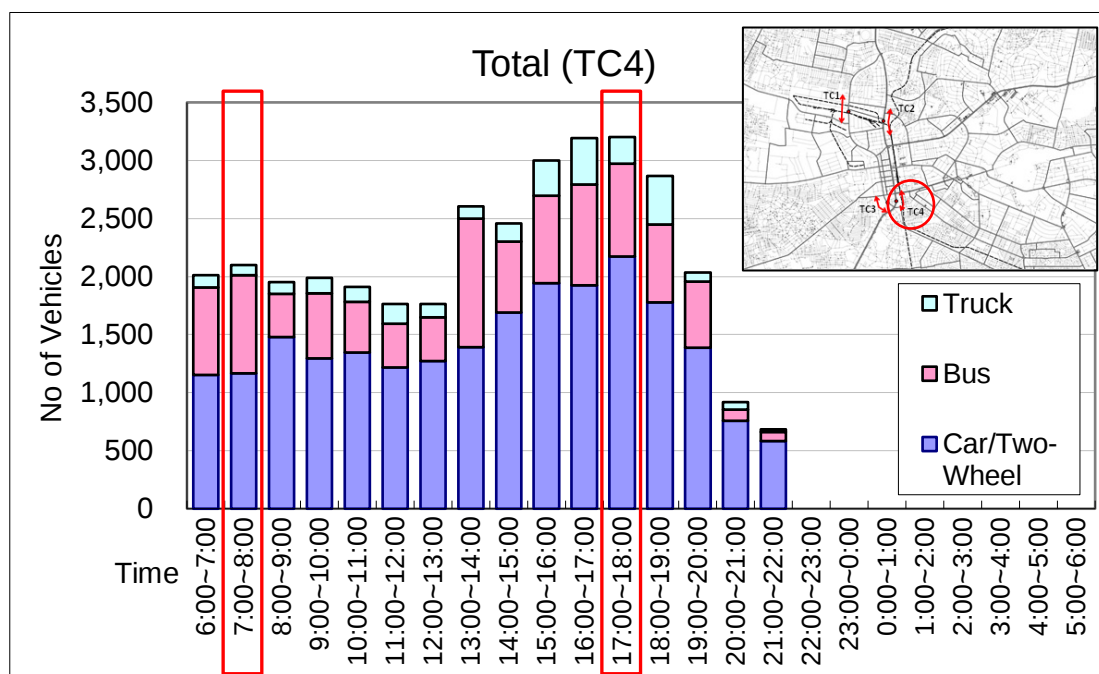
出典：JICA 調査団

図 3.40 ルサカ市内時間別交通量(TC2)



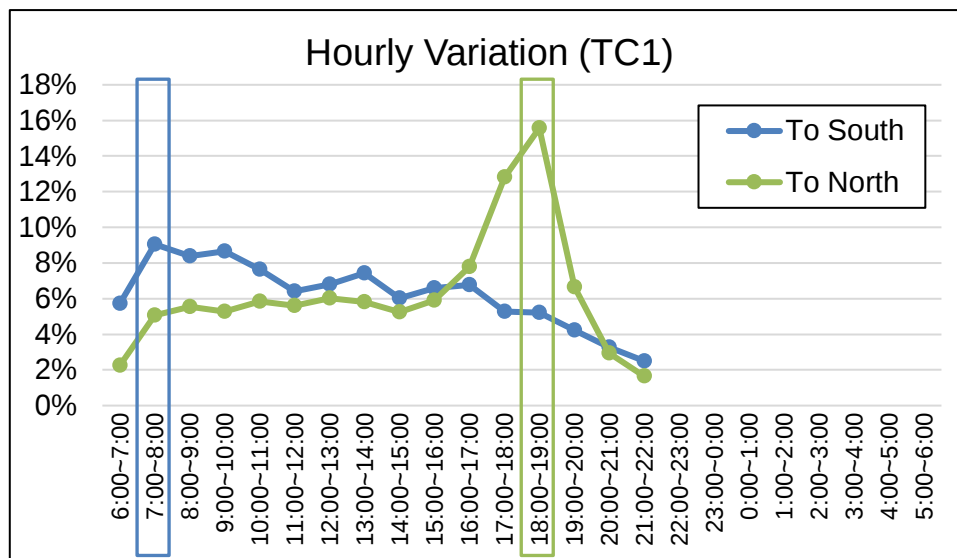
出典：JICA 調査団

図 3.41 ルサカ市内時間別交通量(TC3)



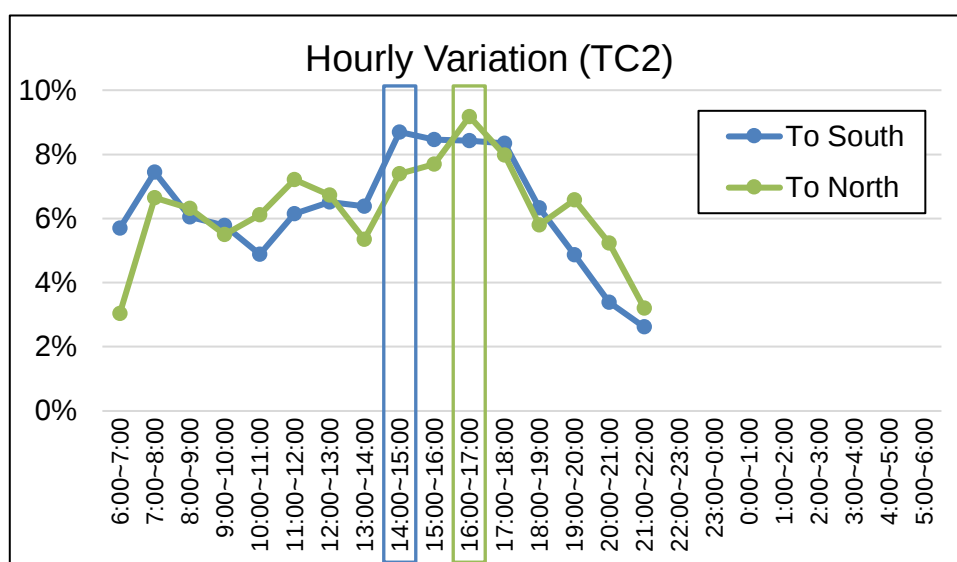
出典：JICA 調査団

図 3.42 ルサカ市内時間別交通量(TC4)



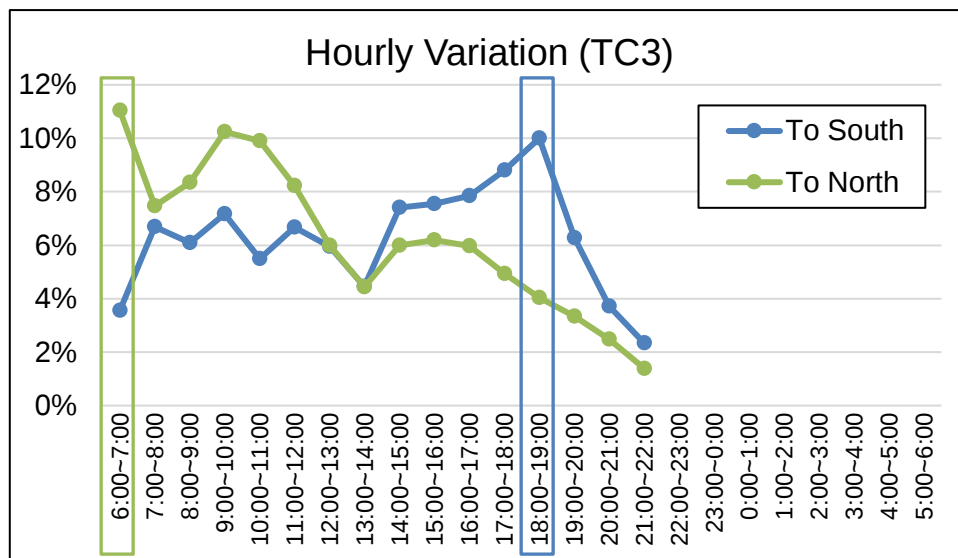
出典：JICA 調査団

図 3.43 ルサカ市内交通量時間構成率(TC1)



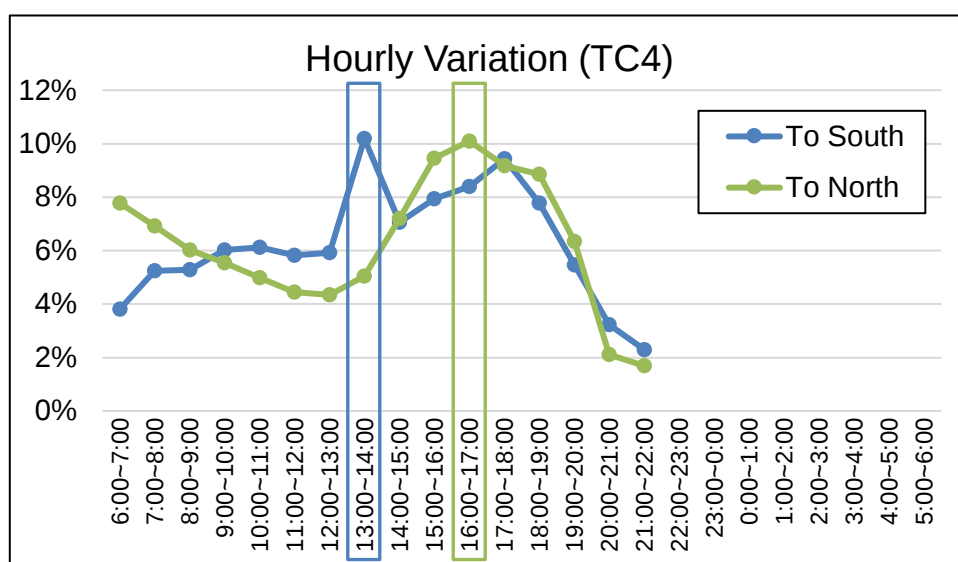
出典：JICA 調査団

図 3.44 ルサカ市内交通量時間構成率(TC2)



出典：JICA 調査団

図 3.45 ルサカ市内交通量時間構成率(TC3)



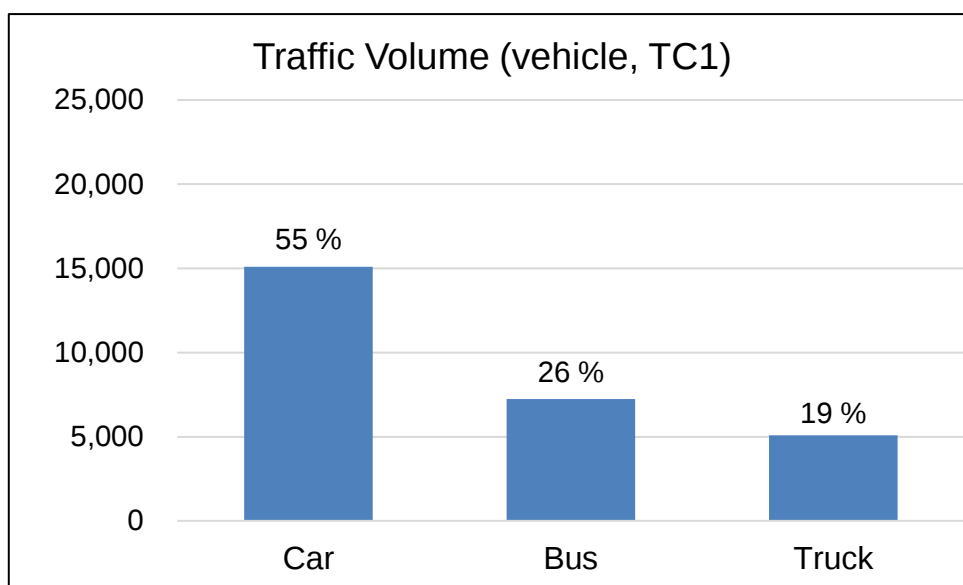
出典：JICA 調査団

図 3.46 ルサカ市内交通量時間構成率(TC4)

b) 車種別交通量

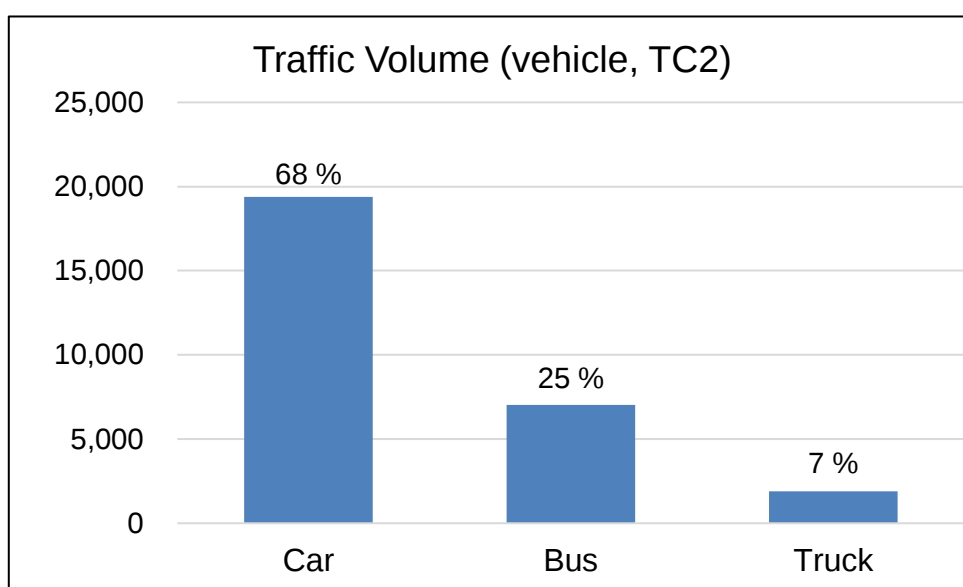
車種別交通量を図 3.47～図 3.50 に示す。

Lumumba Road (TC1、TC3) は Great North Road (TC2) や Kafue Road (TC4) と比較して、Car の比率が低く、Truck の比率が高くなっている。Bus の比率に大きな差は見られない。



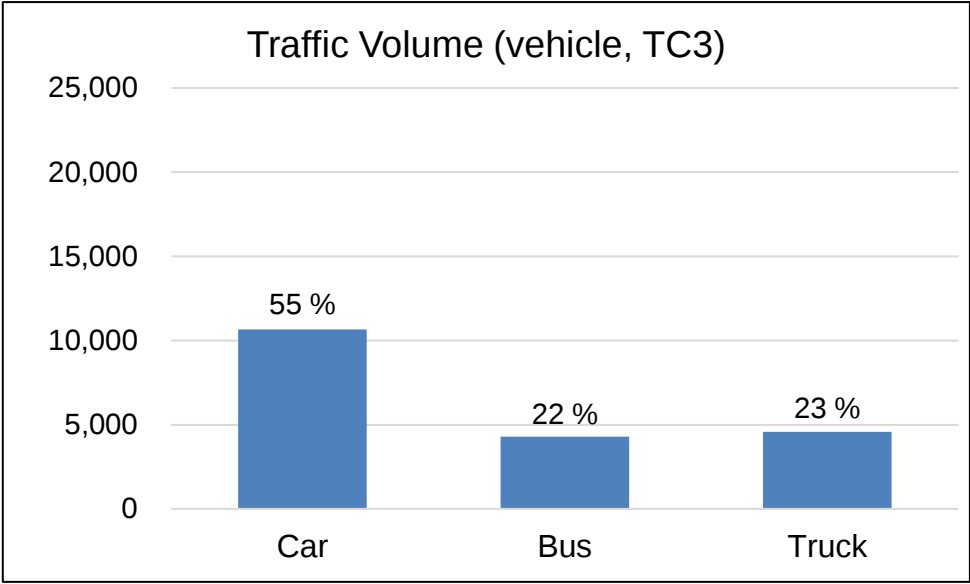
出典：JICA 調査団

図 3.47 ルサカ市内車種別交通量(TC1) (24 時間補正後)



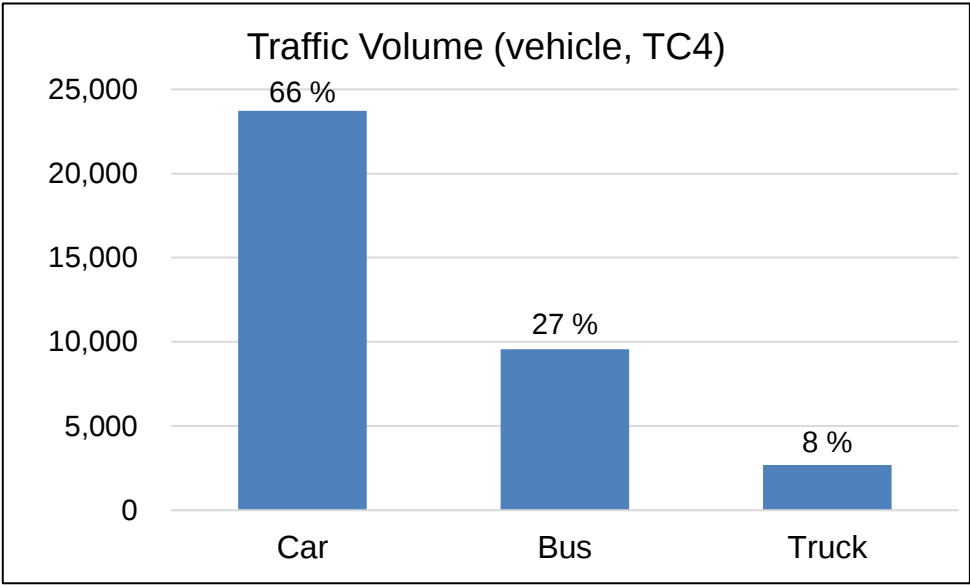
出典：JICA 調査団

図 3.48 ルサカ市内車種別交通量(TC2) (24 時間補正後)



出典：JICA 調査団

図 3.49 ルサカ市内車種別交通量(TC3) (24 時間補正後)

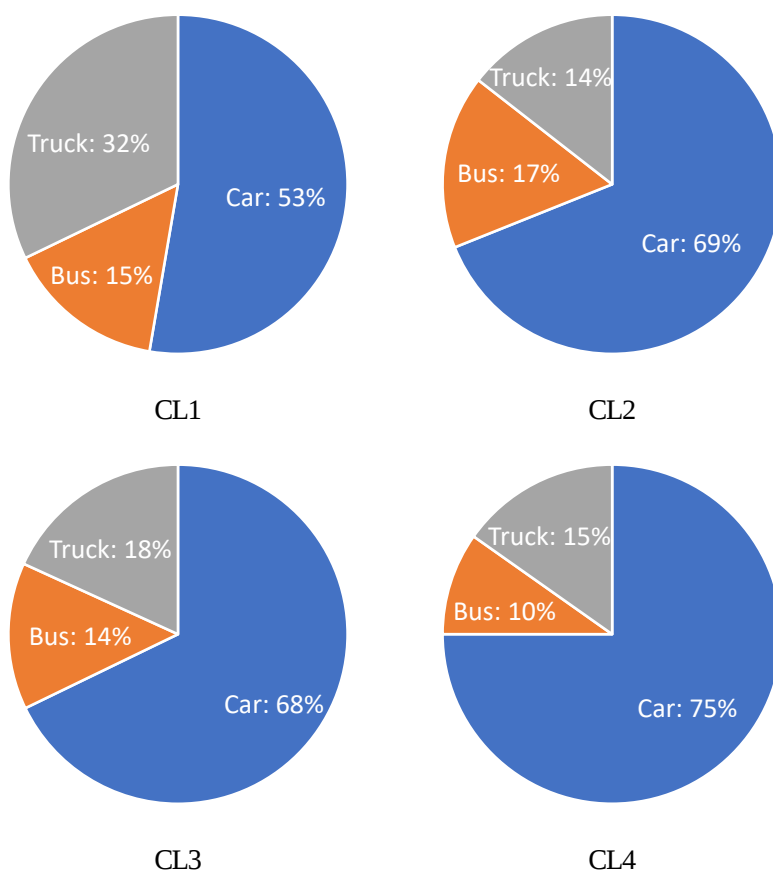


出典：JICA 調査団

図 3.50 ルサカ市内車種別交通量(TC4) (24 時間補正後)

(2) 路側調査

路側インタビューを行った車種比率を図 3.51 に示す。また、コードンライン交通量調査で観測された交通量に対するサンプル率とサンプル数を表 3.4 に示す。



出典：JICA 調査団

図 3.51 路側インタビュー調査車種比率

表 3.4 路側インタビューのサンプル率とサンプル数

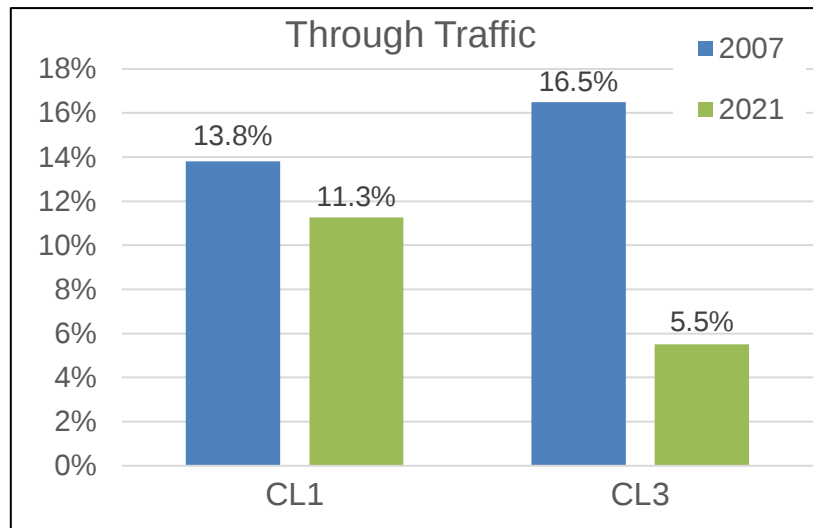
	Inbound		Outbound	
CL1	2.9%	228	3.0%	260
CL2	1.8%	179	3.2%	306
CL3	2.5%	271	3.6%	346
CL4	2.6%	161	3.6%	211

出典：JICA 調査団

a) 通過交通

ルサカ市を通過する交通の全体交通量に対する比率（通過交通率）を図 3.52 と表 3.5 に示す。

2007 年と比較すると通過交通率は下がっている。しかし、交通量の増加に伴い通過交通量は増加している。特に南北の道路（Great North Road、Kafue Road）を利用してルサカ市を通過する交通が多い傾向にある。



出典：JICA 調査団

図 3.52 ルサカ市の南北道路の通過交通率

表 3.5 ルサカ市の流出入路別通過交通率

from/to	CL1	CL2	CL3	CL4
CL1		1.8%	4.4%	0.9%
CL2	0.5%		1.2%	0.5%
CL3	10.5%	0.5%		1.5%
CL4	1.2%	0.2%	0.4%	

出典：JICA 調査団

b) 外環状道路利用

ルサカ市外環状道路の利用率を表 3.6 に示す。

特に通過交通の多い Great North Road（G-N Road）と Kafue Road を利用する場合の外環状道路利用率は 30~50%となっている。

表 3.6 ルサカ市外環状道路利用率

ORR Use Rate	
G-N Road	
To City	From City
30.4%	51.9%
Kafue Road	
To City	From City
46.3%	56.5%

出典：JICA 調査団

(3) 物資流動調査

物資流動調査を実施した物流会社と製造会社（工場）を表 3.7 に示す。

物流会社と製造会社（工場）のルサカ市大手各 5 社を対象に物資流動調査を実施した。

表 3.7 物資流動調査実施会社

	物流会社 (取扱貨物)	工場 (製造品目)
1	AM MOTORS (銅、トウモロコシ、大豆 等)	AFRIPAK ZAMBIA (プラスチック顆粒 等)
2	BOLLORE COMPANY AND LOGISTICS (銅、セメント、油、肥料、化学薬品 等)	CITY CLOTHING FACTORY (衣服 等)
3	GLOBAL LOGISTICS (マンガン、亜鉛、銅、自動車 等)	ORIENTAL QUARRIES (セメント 等)
4	HELLMANN WORLDWIDE LOGISTICS (鉄鉱石、マンガン、化粧品、果物 等)	ORIENTAL STEEL MANUFACTURING LIMITED (鉄鋼 等)
5	SATWANT TRANSPORT (セメント、石炭、肥料、トウモロコシ 等)	TRADE KINGS GROUP (菓子類、清涼飲料水 等)

出典：JICA 調査団

a) ルサカ市付近のボトルネック

ルサカ市内のボトルネックとなっている地点・区間を図 3.53 に示す。

路線では Lumumba Road や Great East Road、Kafue Road が特に挙げられており、要因としては、Lumumba Road では交通集中や軽微な事故、その他の路線では交通集中が挙げられた。また外環状道路や Mumbwe Road のような 1 車線道路もボトルネックとして挙げている。その他にも、Kafue Roundabout や市街地中心部付近（特に南北方向の移動に対して）が交通集中に起因するボトルネックとして挙げられている。

ルサカ市外では、Great North Road や Kafue Road が挙げられ、特にルサカ市方向が交通集中によりボトルネックとなっている。



- 赤破線の路線：
ボトルネックとなっている路線
- 赤丸の地点：
ボトルネックとなっている交差点
- オレンジの地域：
混雑している地域

出典：JICA 調査団

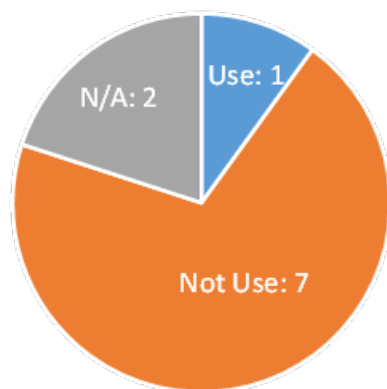
図 3.53 ルサカ市内の主なボトルネック

b) 内環状道路完成による利用意向

内環状道路が完成した際の内環状道路の利用意向を図 3.54 に示す。利用すると回答したのが 2 社、利用しないと回答したのが 7 社、回答無しが 1 社であった。

利用すると回答した理由としては、Lumumba Road や Kafue Road から内環状道路を利用して工場へ出入りするというものであった。

一方、利用しない理由としては、目的地に向かうのに内環状道路を利用する必要がないこと、既存の道路で十分であることなどが挙げられた。



- 利用する理由
 - ・工場地帯へ出入りするため
- 利用しない理由
 - ・目的地の方向が異なるため
 - ・既存の道路で十分なため

出典：JICA 調査団

図 3.54 内環状道路の利用意向

2. 交通量調査結果

表 3.8 コードンライン調査結果(CL1 from Lusaka_06:00-13:00)

ROAD NAME:		GREAT NORTHROAD			STATION:		CL1		DIRECTION:		TO KABWE			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
6	00-15	16		10		1	14	8	21		23	93		
	15-30	28		11	4		18	4	17	1	10	93		
	30-45	21		5	4	1	20	5	13	3	15	87		
	45-60	21		14	4	1	24	6	24	4	28	126		
Sub Total		86	0	40	12	3	76	23	75	8	76	399		
7	00-15	40	10	5		23	13	32		46		169		
	15-30	29	9	3		30	16	9	1	24		121		
	30-45	44	18	5	1	44	5	26		14		157		
	45-60	47	14	9	1	65	8	31	2	15		192		
Sub Total		160	51	22	2	162	42	98	3	99	0	639		
8	00-15	38	2	12	11		39	9	23		24	158		
	15-30	27		8	6	1	34	13	26		20	135		
	30-45	32		9	8	1	47	6	16	1	26	146		
	45-60	23		8	4		29	6	23	1	18	112		
Sub Total		120	2	37	29	2	149	34	88	2	88	551		
9	00-15	27		8	5	1	23	14	34		31	143		
	15-30	30		8	8	2	28	12	31		12	131		
	30-45	28	1	10	9	2	28	14	23	1	24	140		
	45-60	26		9	7	1	32	16	30		27	148		
Sub Total		111	1	35	29	6	111	56	118	1	94	562		
ROAD NAME:		GREAT NORTHROAD			STATION:		CL1		DIRECTION:		TO KABWE			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
10	00-15	26		13	10	4	40	10	26	1	16	146		
	15-30	30		10	2	1	33	12	29	1	31	149		
	30-45	25		7	5	1	37	5	17	1	27	125		
	45-60	53		7	8	3	39	12	24		12	158		
Sub Total		134	0	37	25	9	149	39	96	3	86	578		
11	00-15	31		9	8		24	11	21		13	117		
	15-30	33		9	4	1	37	8	25	1	14	132		
	30-45	24		7	7	1	33	14	28	2	16	132		
	45-60	28		8	9	1	16	6	27	2	9	106		
Sub Total		116	0	33	28	3	110	39	101	5	52	487		
12	00-15	37		7	5	1	37	17	28		25	157		
	15-30	42		12	7		42	10	15		30	158		
	30-45	49		5	7	1	33	9	27	2	25	158		
	45-60	39		8	17		39	9	30	2	39	183		
Sub Total		167	0	32	36	2	151	45	100	4	119	656		
13	00-15	35		13	7		31	11	22		23	142		
	15-30	38		9	10	2	30	8	30	1	26	154		
	30-45	39		18	9		27	16	38		26	173		
	45-60	30		6	13	3	29	19	24		19	143		
Sub Total		142	0	46	39	5	117	54	114	1	94	612		

表 3.9 コードンライン調査結果(CL1_from Lusaka_14:00-21:00)

ROAD NAME:		GREAT NORTHRoad			STATION:	CL1	DIRECTION:	TO KABWE				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle	
												
14	00-15	18		5	1		7	2	7	3	17	60
	15-30	9	16	21	8	1	42	9	18	2	7	133
	30-45	11	11	12	9	1	23	12	33		4	116
	45-60	26	11	16	5		26	6	32		16	138
Sub Total		64	38	54	23	2	98	29	90	5	44	447
15	00-15	16	11	11	9	1	27	9	35	1	2	122
	15-30	18	24	11	8	3	35	19	25		1	144
	30-45	12	9	18	8	2	31	12	20			112
	45-60	20	16	20	6		27	8	38		7	142
Sub Total		66	60	60	31	6	120	48	118	1	10	520
16	00-15	20	11	15	8	1	31	11	41		2	140
	15-30	22	10	23	12		39	19	30		1	156
	30-45	21	9	25	5		45	19	22		1	147
	45-60	26	6	16	5		50	22	27			152
Sub Total		89	36	79	30	1	165	71	120	0	4	595
17	00-15	30	21	15	8		48	15	22	1		160
	15-30	20	21	12	9		53	16	19		4	154
	30-45	27	16	15	9		41	13	22		9	152
	45-60	29	16	8	11	1	43	10	24	2	5	149
Sub Total		106	74	50	37	1	185	54	87	3	18	615
ROAD NAME:		GREAT NORTHRoad			STATION:	CL1	DIRECTION:	TO KABWE				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle	
												
18	00-15	18	17	17	11		38	17	26	1	4	149
	15-30	27	18	20	8		55	10	11		4	153
	30-45	29	18	28	5	2	37	19	18		6	162
	45-60	31	15	14	15		34	8	24	1	3	145
Sub Total		105	68	79	39	2	164	54	79	2	17	609
19	00-15	18	15	16	7	2	28	8	11			105
	15-30	30	22	23	17	17	31	13	10	1		164
	30-45	18	26	22	8	8	30	9	6			127
	45-60	17	10	7	6	6	23	9	12		1	91
Sub Total		83	73	68	38	33	112	39	39	1	1	487
20	00-15	11	17	7	3		25	5	5		1	74
	15-30	23	15	7	7		26	9	9			96
	30-45	18	16	3	3		9	5	5			59
	45-60	10	20	11	1		15	7	7	1	1	73
Sub Total		62	68	28	14	0	75	26	26	1	2	302
21	00-15	11	8	10	2		14	2	3			50
	15-30	5	8	3	1		17	7	5			46
	30-45	3	9	4	2		8	1	1			28
	45-60	2	5	2			13	3	1	1		27
Sub Total		21	30	19	5	0	52	13	10	1	0	151

表 3.10 コードンライン調査結果(CL1_ from Lusaka _22:00-05:00)

ROAD NAME:		GREAT NORTHRoad			STATION:		CL1		DIRECTION:		TO KABWE				Total
Hours		Car			Light		Medium	Heavy	Articulated		Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
22	00-15	10		1			8	1	1					21	
	15-30	9		1	1		12	2	1					26	
	30-45	12		1				1						14	
	45-60	8		2			7	1	1					19	
Sub Total		39	0	5	1	0	27	5	3	0	0			80	
23	00-15	9					1	1	1					12	
	15-30	3		1			2		2					8	
	30-45	6					4							10	
	45-60	1						1	1					3	
Sub Total		19	0	1	0	0	7	2	4	0	0			33	
0	00-15	3					1	1						5	
	15-30	4		2			5	1						12	
	30-45	1					1	1	1					4	
	45-60	3					3		2					8	
Sub Total		11	0	2	0	0	10	3	3	0	0			29	
1	00-15						3	2	1					6	
	15-30								1					1	
	30-45								1					1	
	45-60	2					3		1					6	
Sub Total		2	0	0	0	0	6	2	4	0	0			14	
ROAD NAME:		GREAT NORTHRoad			STATION:		CL1		DIRECTION:		TO KABWE				Total
Hours		Car			Light		Medium	Heavy	Articulated		Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
2	00-15	1					2	4						7	
	15-30	4					3	1						8	
	30-45													0	
	45-60	3		1			3	1	1					9	
Sub Total		8	0	1	0	0	8	6	1	0	0			24	
3	00-15	3		1			3	1						8	
	15-30	7					6	2	3					18	
	30-45	3					5	4	1					13	
	45-60	7					2		1					10	
Sub Total		20	0	1	0	0	16	7	5	0	0			49	
4	00-15	17					8							25	
	15-30	25		1			14		1					41	
	30-45	3					7		2					12	
	45-60	3		1			11		5					20	
Sub Total		48	0	2	0	0	40	0	8	0	0			98	
5	00-15	6		1		1	13	2	9					32	
	15-30	8		2	1	15	26		12		3			67	
	30-45	6		3		3	8	2	16		7			45	
	45-60	16		5			15	4	13		9			62	
Sub Total		36	0	11	1	19	62	8	50	0	19			206	
Total		1815	501	742	419	256	2052	755	1342	137	724			8743	

表 3.11 コードライン調査結果(CL1 to Lusaka_06:00-13:00)

ROAD NAME:		GREAT NORTHRoad			STATION:		CL1		DIRECTION:		TO LUSAKA				Total
Hours		Car			Light		Medium	Heavy	Articulated						
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
6	00-15	18					10	6	21				4	59	
	15-30	37		9	5	2	11	6	21				12	103	
	30-45	68		12	8	1	22	6	14				20	151	
	45-60	72		12	3		25	5	15		1		12	145	
Sub Total		195	0	33	16	3	68	23	71		1		48	458	
7	00-15	69		6	3	1	41	11	18				11	160	
	15-30	93		9	5	1	32	10	15		1		5	171	
	30-45	85		8	8		36	8	26		3		10	184	
	45-60	76		9	4		33	7	26		1		10	166	
Sub Total		323	0	32	20	2	142	36	85		5		36	681	
8	00-15	44		8	7		28	14	25				10	136	
	15-30	40		9	8		14	10	15				7	103	
	30-45	34		13	6		24	10	20				6	113	
	45-60	40		10	8		18	22	23				3	124	
Sub Total		158	0	40	29	0	84	56	83		0		26	476	
9	00-15	38		10	6		25	7	21				1	108	
	15-30	39		12	7		24	9	31				7	129	
	30-45	41		15	6		25	9	25				9	130	
	45-60	38		13	2		28	5	15				4	105	
Sub Total		156	0	50	21	0	102	30	92		0		21	472	
ROAD NAME:		GREAT NORTHRoad			STATION:		CL1		DIRECTION:		TO LUSAKA				Total
Hours		Car			Light		Medium	Heavy	Articulated						
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
10	00-15	25		7	9		21	7	25				7	101	
	15-30	37		10	6		15	12	14		1		4	99	
	30-45	40		9	4		19	10	20				5	107	
	45-60	48		6	10	1	20	5	14		3		5	112	
Sub Total		150	0	32	29	1	75	34	73		4		21	419	
11	00-15	25		1	5		22	8	21				8	90	
	15-30	45		9	11		22	12	33		1		7	140	
	30-45	40		7	3		25	7	20		1		6	109	
	45-60	34		6	6	2	17	13	27				11	116	
Sub Total		144	0	23	25	2	86	40	101		2		32	455	
12	00-15	49		15	7	2	25	13	17				5	133	
	15-30	31		2	4		22	16	15				5	95	
	30-45	26		4	8		12	4	11		1		5	71	
	45-60	28		4	2	3	16	10	13				13	89	
Sub Total		134	0	25	21	5	75	43	56		1		28	388	
13	00-15	32		9	7		19	6	16				20	109	
	15-30	52		9	7		27	7	20		1		5	128	
	30-45	43		8	8		29	13	10				5	116	
	45-60	36		1	8	2	31	11	19		2		3	113	
Sub Total		163	0	27	30	2	106	37	65		3		33	466	

表 3.12 コードライン調査結果(CL1 to Lusaka 14:00-21:00)

ROAD NAME:		GREAT NORTHROAD			STATION:		CL1	DIRECTION:		TO LUSAKA				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
14	00-15	8		10	4	3	10	7	8	2	12	64		
	15-30	26		25	10	2	9	5	12		14	103		
	30-45	10		16	6	2	24	4	9	1	5	77		
	45-60	22		12	6	4	31	5	11		10	101		
Sub Total		66	0	63	26	11	74	21	40	3	41	345		
15	00-15	32		9	3	2	20	18	12	2	6	104		
	15-30	28		14	7		15	20	9		10	101		
	30-45	17		3	1	3	24	23	4		4	79		
	45-60	25		12	4	1	32	6	11	4	7	102		
Sub Total		100	0	38	15	6	91	67	36	6	27	386		
16	00-15	47		15	4	3	17	8	3	1	7	105		
	15-30	38		9	7	1	25	4	5		12	101		
	30-45	58		10	2	6	9	14	9		3	109		
	45-60	29		18	3	8	13	6	7	3	8	95		
Sub Total		170	0	52	16	18	64	32	24	4	30	410		
17	00-15	60		9	1	5	26	14	4		11	130		
	15-30	42		12	4		15	8	8	3	9	101		
	30-45	49		5	2	2	29	4	3		15	109		
	45-60	24		3	8	4	13	9	7		7	75		
Sub Total		175	0	29	15	11	83	35	22	3	42	415		
ROAD NAME:		GREAT NORTHROAD			STATION:		CL1	DIRECTION:		TO LUSAKA				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
18	00-15	66		17	8	4	35	14	5		5	154		
	15-30	45		9	1	2	17	8	2		11	95		
	30-45	49		13	6	8	24	3	7	3	9	122		
	45-60	31		11	4	3	19	10	8		16	102		
Sub Total		191	0	50	19	17	95	35	22	3	41	473		
19	00-15	43		16	17	1	33	10	8	5	6	139		
	15-30	73		20	13	2	37	22	7	3	5	182		
	30-45	45		29	30	3	32	20	9	1	3	172		
	45-60	31		24	24	2	24	30	10			145		
Sub Total		192	0	89	84	8	126	82	34	9	14	638		
20	00-15	29		8	6	3	15	10	5	1	11	88		
	15-30	30		5	5		47	20	8		8	123		
	30-45	45		30	21		40	36	6	3	6	187		
	45-60	25		32	20		33	28	6		8	152		
Sub Total		129	0	75	52	3	135	94	25	4	33	550		
21	00-15	30		15	10	2	15	9	5		12	98		
	15-30	35		14	3	1	21	6	3	2	5	90		
	30-45	23		8	4	1	18	8	5		9	76		
	45-60	17		10	1	4	4	5	4		14	59		
Sub Total		105	0	47	18	8	58	28	17	2	40	323		

表 3.13 コードライン調査結果(CL1 to Lusaka 22:00-05:00)

ROAD NAME:		GREAT NORTHROAD			STATION:		CL1	DIRECTION:	TO LUSAKA			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
22	00-15	8		1	1		10	6	3			29
	15-30	10			1	2	5	5	6			29
	30-45	9			1	1	7	1	1			20
	45-60	11					10	3	3			27
Sub Total		38	0	1	3	3	32	15	13	0	0	105
23	00-15	6					7	3	1	1		18
	15-30	9		1	1		8	1	3			23
	30-45	5					4	1	4			14
	45-60	8			1		4					13
Sub Total		28	0	1	2	0	23	5	8	1	0	68
0	00-15	2					6	1	2			11
	15-30							1	2			3
	30-45	4					5	2	1			12
	45-60	4					2	5	5			16
Sub Total		10	0	0	0	0	13	9	10	0	0	42
1	00-15	3					1	3	4			11
	15-30	1		1			3	6	3			14
	30-45	3					1	3	1			8
	45-60	4					4	1				9
Sub Total		11	0	1	0	0	9	13	8	0	0	42
ROAD NAME:		GREAT NORTHROAD			STATION:		CL1	DIRECTION:	TO LUSAKA			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
2	00-15	1		2			2	3	1			9
	15-30	2			1			2				5
	30-45						1		1			2
	45-60	1						3	1			5
Sub Total		4	0	2	1	0	3	8	3	0	0	21
3	00-15	1		1			1	1	1			5
	15-30	2										2
	30-45	2		1				5	3			11
	45-60	1						2	1			4
Sub Total		6	0	2	0	0	1	8	5	0	0	22
4	00-15	3		2			1	1	2			9
	15-30	1				2	3	2	1		1	10
	30-45	3		2		1	1	1	1		2	11
	45-60	1		5		1	3	2				12
Sub Total		8	0	9	0	4	8	6	4	0	3	42
5	00-15	9		8				2	2		1	22
	15-30	4		4	3		2	2	13		3	31
	30-45	12		5	1		7	3	14		7	49
	45-60	11		9	4		5	2	13		5	49
Sub Total		36	0	26	8	0	14	9	42	0	16	151
Total		2692	0	747	450	104	1567	766	939	51	532	7848

表 3.14 コードライン調査結果(CL2_from Lusaka_06:00-13:00)

ROAD NAME:		GREAT EAST ROAD			STATION:		CL2		DIRECTION:		FROM LSK			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
6	00-15	40		6	2	1	16	2	21		11	99		
	15-30	7					2	1	2		1	13		
	30-45	44		6	3	2	9	2	2		18	86		
	45-60	52		10		2	12	3	4		26	109		
Sub Total		143	0	22	5	5	39	8	29	0	56	307		
7	00-15	75		8		2	7	9	7		18	126		
	15-30	88		8	5		5	1	5		24	136		
	30-45	110		9	7		3	4	12		23	168		
	45-60	115		11	6		2	3	12		9	158		
Sub Total		388	0	36	18	2	17	17	36	0	74	588		
8	00-15	185		9	3		7	15	8	2	7	236		
	15-30	90		10	1	2	13	13	11	1	15	156		
	30-45	90		9	3	1	4	11	13	2	15	148		
	45-60	95		9	1		12	9	11		6	143		
Sub Total		460	0	37	8	3	36	48	43	5	43	683		
9	00-15	118		3	2		10	10	22		9	174		
	15-30	108		7			1	10	15	1	2	144		
	30-45	100		7			5	12	8	2	15	149		
	45-60	125		4	4	1	2	8	11		9	164		
Sub Total		451	0	21	6	1	18	40	56	3	35	631		
ROAD NAME:		GREAT EAST ROAD			STATION:		CL2		DIRECTION:		FROM LSK			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
10	00-15	81		15	2	1	16	13	11	2	5	146		
	15-30	88		6	1		17	7	16		2	137		
	30-45	78		13		1	13	10	10		4	129		
	45-60	110		7	1	8	10	3	22	6	4	171		
Sub Total		357	0	41	4	10	56	33	59	8	15	583		
11	00-15	115		9	1		5	12	18	1	6	167		
	15-30	77		7	1		11	15	18		18	147		
	30-45	95		7	2		4	5	12	2	2	129		
	45-60	126		11	2		7	6	17		7	176		
Sub Total		413	0	34	6	0	27	38	65	3	33	619		
12	00-15	52		8			4	6	9		4	83		
	15-30	110		13	1		12	8	10	1	8	163		
	30-45	120		9	2		3	6	10	2	11	163		
	45-60	135		10	2		6	6	10	2	6	177		
Sub Total		417	0	40	5	0	25	26	39	5	29	586		
13	00-15	135		11			12	24	9		10	201		
	15-30	140		17		1	9	13	12		8	200		
	30-45	70		11	3	2	21	7	9		3	126		
	45-60	48		4	1	1	5	2	6		8	75		
Sub Total		393	0	43	4	4	47	46	36	0	29	602		

表 3.15 コードンライン調査結果(CL2 from Lusaka 14:00-21:00)

ROAD NAME:		GREAT EAST ROAD				STATION:	CL2	DIRECTION:	FROM LSK			
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle	
												
14	00-15	70		3	3	3	47	13	8		6	153
	15-30	83	1	7	1		45	12	6	1	7	163
	30-45	85		15	3		61	16	9	4	10	203
	45-60	73		6	4		62	12	7		6	170
Sub Total		311	1	31	11	3	215	53	30	5	29	689
15	00-15	96		9	1	1	50	14	16	1	2	190
	15-30	84		15	4	1	67	7	9	1	1	189
	30-45	94		9	5	1	51	11	8	3	4	186
	45-60	23		7	2	2	44	15	6	1	10	110
Sub Total		297	0	40	12	5	212	47	39	6	17	675
16	00-15	93		10	2		60	8	17	2	8	200
	15-30	95		3	1		47	15	9		12	182
	30-45	120		4	7		61	10	9	1	10	222
	45-60	115		11	2		51	14	6	1	6	206
Sub Total		423	0	28	12	0	219	47	41	4	36	810
17	00-15	100		5	3		56	4	6	1	6	181
	15-30	120		4	1		50	10	6		11	202
	30-45	120		6	1		44	13	2	2	15	203
	45-60	135		5	1		44	5	2		2	194
Sub Total		475	0	20	6	0	194	32	16	3	34	780
ROAD NAME:		GREAT EAST ROAD				STATION:	CL2	DIRECTION:	FROM LSK			
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle	
												
18	00-15	140		7	5		70	4	6		6	238
	15-30	115		6	2	1	58	6	4	1	9	202
	30-45	100	1	2	4		69	6			12	194
	45-60	105		8	3		56	5	3		11	191
Sub Total		460	1	23	14	1	253	21	13	1	38	825
19	00-15	123		5	3		71	9	10	2	8	231
	15-30	99	1	7	1		50	5	4	4	9	180
	30-45	86		5	2		60	5	4	1	3	166
	45-60	70		2			39	4	2	1	1	119
Sub Total		378	1	19	6	0	220	23	20	8	21	696
20	00-15	64		3			37	6	4	1	6	121
	15-30	69	1	2			27	2	3	1	3	108
	30-45	34		1	2		16	2	1		1	57
	45-60	46		4	1		20	2	3	2	2	80
Sub Total		213	1	10	3	0	100	12	11	4	12	366
21	00-15	49		2			19	3	3		1	77
	15-30	45		5			25	3	3		1	82
	30-45	27		3			15	1	1	1	1	49
	45-60	30		1			11				1	43
Sub Total		151	0	11	0	0	70	7	7	1	4	251
Total		5730	4	456	120	34	1748	498	540	56	505	9691

表 3.16 コードライン調査結果(CL2 to Lusaka_06:00-13:00)

ROAD NAME:		GREAT EAST ROAD			STATION:		CL2	DIRECTION:		T O LSK		
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
6	00-15	44	1	5	1		28	1	12	1		93
	15-30	69		1	4		48	2	11		1	136
	30-45	110		9	5		70	3	6		3	206
	45-60	155	49	5	1		150	4	10	2		376
Sub Total		378	50	20	11	0	296	10	39	3	4	811
7	00-15	110		4	3	2	129	7	3	1		259
	15-30	109		5			92	5	2	1	2	216
	30-45	71		9	1	1	70	1	1	1	1	156
	45-60	94			5		60	6	3		1	169
Sub Total		384	0	18	9	3	351	19	9	3	4	800
8	00-15	90		6		3	55	7	5			166
	15-30	62		4	2		55	4	4	1	4	136
	30-45	68		5	5		45	4	6	3	3	139
	45-60	91		4	3		66	8	3		1	176
Sub Total		311	0	19	10	3	221	23	18	4	8	617
9	00-15	71		8	8		65	13	6	1	2	174
	15-30	76		5	1		60	8	9		2	161
	30-45	69		6	2		55	6	6			144
	45-60	56		5	2		30	9	3	1	1	107
Sub Total		272	0	24	13	0	210	36	24	2	5	586
ROAD NAME:		GREAT EAST ROAD			STATION:		CL2	DIRECTION:		T O LSK		
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
10	00-15	67		9	1		53	9	3	2		144
	15-30	74		11	1	1	67	4	14	3	2	177
	30-45	54		6	1	1	55	6	5	4	1	133
	45-60	87		9	1		53	12	7		1	170
Sub Total		282	0	35	4	2	228	31	29	9	4	624
11	00-15	61		7			49	10	10	2		139
	15-30	60		7			35	12	9	1	1	125
	30-45	54		7		3	47	8	9	3	3	134
	45-60	69		4	5		52	10	8			148
Sub Total		244	0	25	5	3	183	40	36	6	4	546
12	00-15	90		6	2		73	6	14			191
	15-30	80		4	2	1	78	13	6	1	4	189
	30-45	88		5	4	2	55	7	6		3	170
	45-60	88		5	3		54	12	11	1	1	175
Sub Total		346	0	20	11	3	260	38	37	2	8	725
13	00-15	74		8	3	1	62	10	6	6	1	171
	15-30	77		2	1	2	68	8	9		2	169
	30-45	84		3	1	1	68	5	5		3	170
	45-60	79		10		2	71	8	8			178
Sub Total		314	0	23	5	6	269	31	28	6	6	688

表 3.17 コードライン調査結果(CL2 to Lusaka 14:00-21:00)

ROAD NAME:		GREAT EAST ROAD			STATION:		CL2	DIRECTION:		T O LSK			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated		Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
14	00-15	45		13	2		43	6	3	1			113
	15-30	51		12		1	57	14	6	1	1		143
	30-45	52		9		1	70	19	2	1	1		155
	45-60	47		11	2	2	58	12		6			136
Sub Total		195	0	45	4	4	226	51	11	9	2		547
15	00-15	56		16	4	1	60	9	4	1	7		158
	15-30	54		9	1		50	10	7		5		136
	30-45	55	1	18	1	1	58	14	4	1	3		158
	45-60	67	2	10	2		58	11	8		6		164
Sub Total		232	3	53	8	2	226	44	23	2	21		614
16	00-15	79	1	14	2		67	8	5		3		179
	15-30	76		20	3		67	8	4	3	13		194
	30-45	58		12	2		61	8	8		14		163
	45-60	87		10	4	1	49	12	5	1	14		183
Sub Total		300	1	56	11	1	244	36	22	4	44		719
17	00-15	80		12	2	1	65	6	6	1	12		185
	15-30	87		12	5	3	83	19	3		19		231
	30-45	108		10	9	1	76	10	2	2	18		236
	45-60	101		11	2	1	54	13	7	1	14		204
Sub Total		376	0	45	18	6	278	48	18	4	63		856
ROAD NAME:		GREAT EAST ROAD			STATION:		CL2	DIRECTION:		T O LSK			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated		Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
18	00-15	61		17	2	2	56	9	6		10		163
	15-30	65	1	13	1	1	35	8	5	2	8		139
	30-45	81		19	1	1	62	9	5	1	8		187
	45-60	74	1	7			57	9	2		6		156
Sub Total		281	2	56	4	4	210	35	18	3	32		645
19	00-15	56		5	2		52	7	4		5		131
	15-30	41		7	1		34	5	4		6		98
	30-45	42		12	2		53	9	4	1	1		124
	45-60	40		9	1		39	4	7	1	4		105
Sub Total		179	0	33	6	0	178	25	19	2	16		458
20	00-15	52		4		1	46	6	2		3		114
	15-30	49		4	3		32	3			3		94
	30-45	36		4	2		29	8			5		84
	45-60	34	1	2	3	1	9	3	3				56
Sub Total		171	1	14	8	2	116	20	5	0	11		348
21	00-15	23		6			27	2	3		1		62
	15-30	25		4			18	1	2	1	1		52
	30-45	27		4	1		9	3					44
	45-60	19		2			13	1	1				36
Sub Total		94	0	16	1	0	67	7	6	1	2		194
Total		4359	57	502	128	39	3563	494	342	60	234		9778

表 3.18 コードライン調査結果(CL3_from Lusaka_06:00-13:00)

ROAD NAME:		KAFUE ROAD			STATION:		CL3		DIRECTION:		LUSAKA TO KAFUE			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
6	00-15	20		1	1	2	3	1	5				33	
	15-30	17		12	1	1	6	3	24				64	
	30-45	22		12	1		23	5	21		5		89	
	45-60	58		12	2	5	45	1	14	1	5		141	
Sub Total		115	0	37	5	8	77	10	64	1	10		327	
7	00-15	95	15		2	2	76	3	20	2	7		222	
	15-30	98	14				78	6	15		3		212	
	30-45	95	26	1	1	1	72	6	18	2	11		233	
	45-60	76	19		3	3	51	7	17	3	1		180	
Sub Total		364	74	1	6	6	275	22	70	7	22		847	
8	00-15	51		12	6		38	9	18	2	7		143	
	15-30	64		15			46	1	16		6		148	
	30-45	46		16		2	45	6	27	1	2		145	
	45-60	57		17	3		58	5	24		1		165	
Sub Total		218	0	60	9	2	187	21	85	3	16		601	
9	00-15	52		15	1	1	41	5	40		1		156	
	15-30	57		13			60	6	23	2			161	
	30-45	75		13		1	44	8	24				165	
	45-60	61		19	2		23	6	24	1	1		137	
Sub Total		245	0	60	3	2	168	25	111	3	2		619	
ROAD NAME:		KAFUE ROAD			STATION:		CL3		DIRECTION:		LUSAKA TO KAFUE			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
10	00-15	59		15	1	1	48	2	27	2	1		156	
	15-30	73		12	2		54	7	30				178	
	30-45	40		25			32	11	33	2	1		144	
	45-60	48		11	1		60	5	20		1		146	
Sub Total		220	0	63	4	1	194	25	110	4	3		624	
11	00-15	80		17	2		62	8	27	1	3		200	
	15-30	52		13	1		53	7	18		1		145	
	30-45	47		17	2	1	60	7	28	2			164	
	45-60	72		15	1	1	57	1	20	2	1		170	
Sub Total		251	0	62	6	2	232	23	93	5	5		679	
12	00-15	81		19	2		51	2	38		2		193	
	15-30	94		13	1	1	47	1	28				185	
	30-45	72		23	2		58	3	42	1			201	
	45-60	101		17			78	7	35				238	
Sub Total		348	0	72	5	1	232	13	141	1	2		815	
13	00-15	45		5	1	2	63	2	44	1	1		164	
	15-30	73		7	2	1	60	7	31	2	1		184	
	30-45	82		15	3	2	73	10	14		1		200	
	45-60	79		18	10		64	5	19				195	
Sub Total		279	0	45	16	5	260	24	108	3	3		743	

表 3.19 コードンライン調査結果(CL3 from Lusaka 14:00-21:00)

ROAD NAME:		KAFUE ROAD			STATION:		CL3		DIRECTION:		LUSAKA TO KAFUE			
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle			
														
14	00-15	66	11	15	1	2	61	10	11	1	1	179		
	15-30	60	11	20	1	1	42	23	12	1		171		
	30-45	38	17	10	1		47	28	10		1	150		
	45-60	50	21	13	3		57	13	9	1		167		
Sub Total		214	60	58	6	3	207	72	42	3	2	667		
15	00-15	39	24	19	1	1	38	20	11	1		152		
	15-30	55	19	13	2		42	12	15	2	3	163		
	30-45	48	20	12	1		48	13	23	1		166		
	45-60	32	9	13	3		50	8	18	2		135		
Sub Total		174	72	57	7	1	176	53	67	6	3	616		
16	00-15	38	16	10	2		60	18	23	3	3	173		
	15-30	57	10	10	7		54	20	18	1	6	183		
	30-45	59	15	13			58	9	16	2	3	173		
	45-60	62	15	18	1		38	19	22	0	4	177		
Sub Total		216	56	51	10	0	206	66	79	6	16	706		
17	00-15	63	20	20	1		71	17	19		1	212		
	15-30	81	22	18	2	2	60	21	9	2	4	221		
	30-45	81	28	12	2	1	64	21	7	2	3	221		
	45-60	71	24	10	1		50	14	6	1	3	180		
Sub Total		296	94	60	6	3	245	73	41	5	11	834		
ROAD NAME:		KAFUE ROAD			STATION:		CL3		DIRECTION:		LUSAKA TO KAFUE			
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle			
														
18	00-15	51	21	16	2	1	67	17	12	1		188		
	15-30	65	14	11	3		55	17	6	3	1	175		
	30-45	60	6	17	3		31	10	7		1	135		
	45-60	70	9	15	1	1	33	8	7	2	1	147		
Sub Total		246	50	59	9	2	186	52	32	6	3	645		
19	00-15	72	7	9	1		23	9	10			131		
	15-30	51	2	2			24	13	7	2		101		
	30-45	33		5			23	4	2			67		
	45-60	38	3	8			38	7	3			97		
Sub Total		194	12	24	1	0	108	33	22	2	0	396		
20	00-15	47					55	2	4			108		
	15-30	46		5			25	2	1	1		80		
	30-45	51	1	3			17	2	1		1	76		
	45-60	50		1			8	7	1			67		
Sub Total		194	1	9	0	0	105	13	7	1	1	331		
21	00-15	55		1	2		19	5	1	2		85		
	15-30	30		1			15	10				56		
	30-45	17					9	1		1		28		
	45-60	25					6	3				34		
Sub Total		127	0	2	2	0	49	19	1	3	0	203		
Total		3701	419	720	95	36	2907	544	1073	58	99	9653		

表 3.20 コードライン調査結果(CL3 to Lusaka_06:00-13:00)

ROAD NAME:		KAFUE ROAD			STATION:		CL3	DIRECTION:	KAFUE TO LUSAKA				
Hours		Car			Light		Medium	Heavy	Articulated			Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle		
													
6	00-15	42		8	3		11		9		2	75	
	15-30	71		16	5		26	5	16		9	148	
	30-45	93		14			41	10	1	1	3	163	
	45-60	112		14	2		62	9	12		11	222	
Sub Total		318	0	52	10	0	140	24	38	1	25	608	
7	00-15	230		20	3		79	8	14		4	358	
	15-30	450		26	8		112	8	25		11	640	
	30-45	178		19	2	1	50	14	11	1	3	279	
	45-60	280		19	1	1	63	7	11	2	21	405	
Sub Total		1138	0	84	14	2	304	37	61	3	39	1682	
8	00-15	158		20			34	7	13	1	2	235	
	15-30	140		11			26	5	15	1	4	202	
	30-45	100		15	2		35	4	20	2	8	186	
	45-60	136		20	4		16	12	36	1	1	226	
Sub Total		534	0	66	6	0	111	28	84	5	15	849	
9	00-15	125		17	1		18	3	11		2	177	
	15-30	124		15	2		23	7	26		4	201	
	30-45	94		16	1		29	6	24	2	5	177	
	45-60	109		16			23	7	19	1	5	180	
Sub Total		452	0	64	4	0	93	23	80	3	16	735	
ROAD NAME:		KAFUE ROAD			STATION:		CL3	DIRECTION:	KAFUE TO LUSAKA				
Hours		Car			Light		Medium	Heavy	Articulated			Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle		
													
10	00-15	85		10			22	6	22		1	146	
	15-30	103		9	1	1	19	16	24	1	1	175	
	30-45	84		16	2		32	10	7		3	154	
	45-60	73		18	2		24	5	14			136	
Sub Total		345	0	53	5	1	97	37	67	1	5	611	
11	00-15	99	1	14	1		26	18	20	1	6	188	
	15-30	94		13	2		20	9	9	2	2	151	
	30-45	85		16	2		15	21	21		3	163	
	45-60	101		8		1	10	12	12	2	3	149	
Sub Total		379	1	51	5	1	71	60	62	5	14	649	
12	00-15	90		19		1	26	9	19	2	3	169	
	15-30	100		12	1	1	20	4	27	2	3	170	
	30-45	102		11	1	1	18	8	21	1		163	
	45-60	143		8	1		25	5	19	1	1	203	
Sub Total		435	0	50	3	3	89	26	86	6	7	705	
13	00-15	125		10			30	11	17		2	195	
	15-30	92		26			36	11	15	1		181	
	30-45	82		10	2	1	21	10	19	3	3	151	
	45-60	97		14			19	10	11	1		152	
Sub Total		396	0	60	2	1	106	42	62	5	5	679	

表 3.21 コードライン調査結果(CL3 to Lusaka 14:00-21:00)

ROAD NAME:		KAFUE ROAD			STATION:		CL3	DIRECTION:		KAFUE TO LUSAKA		Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle	
												
14	00-15	65	6	16	1		75	18	18		2	201
	15-30	45	2	8	3	5	64	9	16			152
	30-45	53	7	15	3	2	67	21	27			195
	45-60	42	4	15	3		65	19	5			153
Sub Total		205	19	54	10	7	271	67	66	0	2	701
15	00-15	70	7	14	5		57	17	19		3	192
	15-30	44	6	9	1	1	43	9	10	2	3	128
	30-45	54	6	20	2		39	9	15	2	3	150
	45-60	47	6	15			49	22	11	4	5	159
Sub Total		215	25	58	8	1	188	57	55	8	14	629
16	00-15	60	5	12	1	1	56	15	13	2	6	171
	15-30	46	5	17	5		43	12	15		10	153
	30-45	40	3	17			35	8	17	1	15	138
	45-60	58	5	23	3	1	60	28	15		20	213
Sub Total		204	18	69	9	2	194	63	60	3	51	673
17	00-15	56	10	13	6		59	19	9	1	10	183
	15-30	64	11	14	2		66	13	11	2	24	207
	30-45	60	16	26	4		50	20	15		11	202
	45-60	65	3	34	15		60	20	8	1	10	216
Sub Total		245	40	87	27	0	235	72	43	4	55	808
ROAD NAME:		KAFUE ROAD			STATION:		CL3	DIRECTION:		KAFUE TO LUSAKA		Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle	
												
18	00-15	75	10	20	2		80	10	8	1	15	221
	15-30	70	12	21			60	20	12		3	198
	30-45	50	15	45	1	3	57	17	20		13	221
	45-60	60	8	15	1	1	53	8	9	2	1	158
Sub Total		255	45	101	4	4	250	55	49	3	32	798
19	00-15	41	6	22			32	7	11		3	122
	15-30	36		17		1	18	4	4	1	3	84
	30-45	28		6	1		23	3	3			64
	45-60	29		6	1	1	15	7	7		2	68
Sub Total		134	6	51	2	2	88	21	25	1	8	338
20	00-15	33	2	13	3		25	9	10			95
	15-30	31	5	7			12	3	9		1	68
	30-45	19	5	7	1		25	8	3			68
	45-60	19	1	2		1	11	4	1			39
Sub Total		102	13	29	4	1	73	24	23	0	1	270
21	00-15	18		1			16	5		1		41
	15-30	16	1	2	1		16	4	2		2	44
	30-45	16	2	5	1	1	12	2				39
	45-60	17	2				8	3	1	1		32
Sub Total		67	5	8	2	1	52	14	3	2	2	156
Total		5424	172	937	115	26	2362	650	864	50	291	10891

表 3.22 コードライン調査結果(CL4_from Lusaka_06:00-13:00)

ROAD NAME:		MUMBWA ROAD			STATION:	CORDON LINE CL4		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
6	00-15	8	1	13	3	1	6	2	7		28	69
	15-30	5	1	14	1		13	2	6		45	87
	30-45	15		13	3		16	5	7		45	104
	45-60	5		3			5		1		34	48
Sub Total		33	2	43	7	1	40	9	21	0	152	308
7	00-15	19	1	11	5	2	19	1	16		45	119
	15-30	23	1	24	1	2	28	4	7		23	111
	30-45	16	2	30	6	1	24	4	11		22	116
	45-60	14	2	9			28	7	2		25	85
Sub Total		72	6	74	12	5	95	16	36	0	115	431
8	00-15	14		16	3		30	3	18		45	129
	15-30	11	1	13	1		22	4	8		23	83
	30-45	12	1	12			16	8	10		22	81
	45-60	16		16	1		28	5	5	1	25	97
Sub Total		53	2	57	5	0	96	20	41	1	115	390
9	00-15	13		19			30	2	15		8	87
	15-30	19	1	11	1		30	3	15	1	16	97
	30-45	11		15		1	24	11	14		14	90
	45-60	13		20			19	9	18	1	7	87
Sub Total		56	1	65	1	1	103	25	62	2	45	361
ROAD NAME:		MUMBWA ROAD			STATION:	CORDON LINE CL4		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
10	00-15	21		26			27	1	19		20	114
	15-30	16		12			28	5	17	1	10	89
	30-45	8	1	8	2	1	40	5	18		10	93
	45-60	20		18	1		23	5	16	2	15	100
Sub Total		65	1	64	3	1	118	16	70	3	55	396
11	00-15	30		18	3		25	10	22		24	132
	15-30	5		12		1	25	6	13		9	71
	30-45	5		19			26	3	17		10	80
	45-60	22		14		1	28	2	21	2	12	102
Sub Total		62	0	63	3	2	104	21	73	2	55	385
12	00-15	17		14	1	1	30	3	12	1	7	86
	15-30	16		12	1	1	28	8	17		9	90
	30-45	20		12	1	1	37	3	17		7	98
	45-60	15		18			30	2	12		9	88
Sub Total		68	0	56	3	3	123	16	58	1	32	360
13	00-15	13		6	2	1	28	3	16	1	11	79
	15-30	15		17	5		19	5	16	1	6	84
	30-45	16		16	1		27	7	15	1	9	92
	45-60	11		10	1		27	4	8		10	71
Sub Total		55	0	49	9	1	99	19	55	3	36	326

表 3.23 コードンライン調査結果(CL4 from Lusaka 14:00-21:00)

ROAD NAME:		MUMBWA ROAD			STATION:		CORDON LINE CL4		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
14	00-15	30		11	5		31	10	15	1		103	
	15-30	13		25	11		27	10	37	1		124	
	30-45	40		23	3		48	13	18	1	2	148	
	45-60	18		8			15	13	20		1	75	
Sub Total		101	0	67	19	0	121	46	90	3	3	450	
15	00-15	30		20			50	15	40	1		156	
	15-30	37		25	13		47	30	25	1	1	179	
	30-45	21		16			35	16	40	1	1	130	
	45-60	15		10			15	15	20			75	
Sub Total		103	0	71	13	0	147	76	125	3	2	540	
16	00-15	32		20	1		30	15	25	1	1	125	
	15-30	5		17			32	10	35		1	100	
	30-45	9		17	3		45	22	40	5	3	144	
	45-60	45		39	1		35	25	43		1	189	
Sub Total		91	0	93	5	0	142	72	143	6	6	558	
17	00-15	42		8	2		40	21	30			143	
	15-30	20		17	3		35	5	10			90	
	30-45	50		36	4	1	67	22	35		6	221	
	45-60	5		30	25	1	30		25	15	10	141	
Sub Total		117	0	91	34	2	172	48	100	15	16	595	
ROAD NAME:		MUMBWA ROAD			STATION:		CORDON LINE CL4		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
18	00-15	19		21	1		20	4	3		10	78	
	15-30	20		10	1		24	3	12	3		73	
	30-45	21		13	2		23	6	11			76	
	45-60	29		8			18	5	6		5	71	
Sub Total		89	0	52	4	0	85	18	32	3	15	298	
19	00-15	18		9			18	6	4			55	
	15-30	30		7			18	3	13			71	
	30-45	37		7	2		22	1	10			79	
	45-60	13		4			18	1	8		2	46	
Sub Total		98	0	27	2	0	76	11	35	0	2	251	
20	00-15	16		3			13	2	3	1		38	
	15-30	10		3			18	3	2			36	
	30-45	14		1			10	2	8			35	
	45-60	15		1			7		2		1	26	
Sub Total		55	0	8	0	0	48	7	15	1	1	135	
21	00-15	10		3			7		7		1	28	
	15-30	9		1	1		12		7			30	
	30-45	6					8		3			17	
	45-60	5		1			8		3			17	
Sub Total		30	0	5	1	0	35	0	20	0	1	92	
Total		1148	12	885	121	16	1604	420	976	43	651	5876	

表 3.24 コードライン調査結果(CL4 to Lusaka_06:00-13:00)

ROAD NAME:		MUMBWA ROAD			STATION:	CORDON LINE CL4		DIRECTION:	TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
6	00-15	15	4	10		1	10	1	7		50	98
	15-30	33	4	20	3	1	31	3	8	1	19	123
	30-45	31	6	17	3		28	4	17	1	50	157
	45-60	60	6	16	2	1	20	2	17	1	40	165
Sub Total		139	20	63	8	3	89	10	49	3	159	543
7	00-15	20	5	15	0	0	30	3	1	0	55	129
	15-30	35	3	12	2	0	22	1	9	0	60	144
	30-45	54	1	33	2	1	23	4	15	1	55	189
	45-60	34	0	17	0	1	9	7	10	0	0	78
Sub Total		143	9	77	4	2	84	15	35	1	170	540
8	00-15	35	3	17	7	0	25	1	25	0	55	168
	15-30	50	2	13	0	0	20	3	10	0	50	148
	30-45	31	0	18	4	0	18	7	21	0	55	154
	45-60	20	0	15	2	0	20	2	35	1	65	160
Sub Total		136	5	63	13	0	83	13	91	1	225	630
9	00-15	17	1	22	1		20	4	13	1	110	169
	15-30	21	1	13	2		13	1	17		65	133
	30-45	26	0	15	2		25	5	11		70	154
	45-60	12	0	13			24	3	23		55	130
Sub Total		76	2	63	5	0	82	13	64	1	300	606
ROAD NAME:		MUMBWA ROAD			STATION:	CORDON LINE CL4		DIRECTION:	TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
10	00-15	17		13			26	8	14	1	65	144
	15-30	22		22	3		20	5	19	1	65	157
	30-45	7		2			10		13		70	102
	45-60	27		21			18	3	16		55	140
Sub Total		73	0	58	3	0	74	16	62	2	255	543
11	00-15	29		8	1		23	3	33		3	100
	15-30	23		14	1		17	1	5			61
	30-45	31		16	2		30	5	10			94
	45-60	25		14			19	2	10	2		72
Sub Total		108	0	52	4	0	89	11	58	2	3	327
12	00-15	15		8	1		23	3	10		3	63
	15-30	18	4	14	1		17	1	22			77
	30-45	28		14	2		30	5	18	2		99
	45-60	17		16			19	11	15		3	81
Sub Total		78	4	52	4	0	89	20	65	2	6	320
13	00-15	28		8	1	2	9	10	7	1	6	72
	15-30	21		22	1		19	2	13	1	7	86
	30-45	13	1	9	2		8	4	9			46
	45-60	11		6	2	1	14	1	19			54
Sub Total		73	1	45	6	3	50	17	48	2	13	258

表 3.25 コードライン調査結果(CL4 to Lusaka 14:00-21:00)

ROAD NAME:		MUMBWA ROAD			STATION:	CORDON LINE CL4		DIRECTION:	TOTOWN			Articulated	Total
Hours		Car			Light	Medium	Heavy	Articulated		Articulated			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
14	00-15	16	1	3	3	1	12	4	10			5	55
	15-30	39		10			12	8	10			13	92
	30-45	27		11	2		7	15	13			10	85
	45-60	38		11	2		4	7	9	1		6	78
Sub Total		120	1	35	7	1	35	34	42	1		34	310
15	00-15	37		13			8	8	10			5	81
	15-30	34		10	2	1	12	9	11	1		11	91
	30-45	31		8	1		18	6	6			15	81
	45-60	30	1	10	3	1	10	8	7			20	90
Sub Total		132	1	39	6	2	46	31	34	1		51	343
16	00-15	45	1	8		2	19	8	3			28	114
	15-30	32		12			17	13	6			25	105
	30-45	40		9		3	14	5	14			20	105
	45-60	40		11	1	3	9	7	19	1		18	109
Sub Total		157	1	40	1	8	59	33	42	1		91	433
17	00-15	50		27	3	2	15	10	11	2		21	141
	15-30	40		16	2		20	6	8			30	122
	30-45	45		17	3		12	5	11			20	113
	45-60	34		16			10	9	6	1		21	97
Sub Total		169	0	76	8	2	57	30	36	3		92	473
ROAD NAME:		MUMBWA ROAD			STATION:	CORDON LINE CL4		DIRECTION:	TOTOWN			Articulated	Total
Hours		Car			Light	Medium	Heavy	Articulated		Articulated			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
18	00-15	40		10	5		12	11	12			20	110
	15-30	29		10	1		7	4	12			21	84
	30-45	45		14	1	1	11	7	7			30	116
	45-60	31		15	1		8	6	3			8	72
Sub Total		145	0	49	8	1	38	28	34	0		79	382
19	00-15	17		9			6	9	6			8	55
	15-30	17		9			10	4	2			2	44
	30-45	33		11			4	4	4	1		4	61
	45-60	17		7			4	2	2			2	34
Sub Total		84	0	36	0	0	24	19	14	1		16	194
20	00-15	13		7			4	5	2			4	35
	15-30	15		3	1		5	3	2			1	30
	30-45	8		1			12	3					24
	45-60	12		2			4	3				3	24
Sub Total		48	0	13	1	0	25	14	4	0		8	113
21	00-15	7		1			8	1	4				21
	15-30	13		2			2	2	4				23
	30-45	3		1			4	3	1				12
	45-60	4		2				1	1				8
Sub Total		27	0	6	0	0	14	7	10	0		0	64
Total		1708	44	767	78	22	938	311	688	21		1502	6079

表 3.26 スクリーンライン調査結果(SL1_to East_06:00-13:00)

ROAD NAME:		KATIMA MULILO			STATION:		SL1	DIRECTION:	FROM GREAT NORTH			Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Bicycle	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer			
												
6	00-15	8	0	4	1	0	2	4	2		6	27
	15-30	19	0	5	1	0	5	7	6		30	73
	30-45	32	0	8	2	0	3	2	3		70	120
	45-60	58	0	10	1	0	15	1	4	1	122	212
Sub Total		117	0	27	5	0	25	14	15	1	228	432
7	00-15	86	1	11	1	1	21	4	3	2	115	245
	15-30	105		12	2		36	9	1	3	68	236
	30-45	100		6	1		24	12	5		93	241
	45-60	121		6	1		20	19	3		98	286
Sub Total		412	1	35	5	1	101	44	12	5	372	988
8	00-15	105	0	8			22	12	4	6	53	210
	15-30	78	2	6	1		16	15	1	2	91	212
	30-45	89	2	7		2	26	18	4	2	69	219
	45-60	57	0	5			12	20	4	2	73	173
Sub Total		329	4	26	1	2	76	65	13	12	286	814
9	00-15	57		5	1		14	18	1	2	75	173
	15-30	48		2	1	1	18	20	2		62	154
	30-45	64		2	0	1	23	11	5		47	153
	45-60	42		1	0		8	9	1	1	36	98
Sub Total		211	0	10	2	2	63	58	9	3	220	578
ROAD NAME:		KATIMA MULILO			STATION:		SL1	DIRECTION:	FROM GREAT NORTH			Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Bicycle	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer			
												
10	00-15	77		3	0		20	20	1	1	108	230
	15-30	38		1	1		11	7	2	2	37	99
	30-45	58		1	1		6	12	2	1	96	177
	45-60	72		1	3		24	12	4	0	93	209
Sub Total		245	0	6	5	0	61	51	9	4	334	715
11	00-15	59		4			15	9	3	0	3	93
	15-30	65		1	2		16	14	1	1	12	112
	30-45	60		1			17	12		1	15	106
	45-60	59		3	2		20	12		1	17	114
Sub Total		243	0	9	4	0	68	47	4	3	47	425
12	00-15	72		3			15	10	3	3	61	167
	15-30	90		4			17	15	3	1	78	208
	30-45	76					29	9	5	1	50	170
	45-60	83		3			16	18	7	2	77	206
Sub Total		321	0	10	0	0	77	52	18	7	266	751
13	00-15	83		1	1		39	2	2	2	60	190
	15-30	70		2			15	4	4		53	148
	30-45	66		4			21	6	6		73	176
	45-60	87		2	1		9	3	3	4	59	168
Sub Total		306	0	9	2	0	84	15	15	6	245	682

表 3.27 スクリーンライン調査結果(SL1_to East_14:00-21:00)

ROAD NAME:		KATIMAMULILO			STATION:		SL1		DIRECTION:		FROM GREAT NORTH			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
14	00-15	40		5			21	10	5		68	149		
	15-30	53		1			22	11	3	1	66	157		
	30-45	55		2			22	10	8	2	58	157		
	45-60	45		6			18	9	7	1	60	146		
Sub Total		193	0	14	0	0	83	40	23	4	252	609		
15	00-15	47		3			29	5	6	3	44	137		
	15-30	43		2			29	11	9	1	39	134		
	30-45	59		3			33	7	8	1	45	158		
	45-60	63		1	1		23	15	9	1	55	168		
Sub Total		212	0	9	1	0	114	38	32	6	183	595		
16	00-15	48		7			45	12	11		70	193		
	15-30	59		5	1		24	9	7	1	52	158		
	30-45	59		6	2		28	15	4	1	57	172		
	45-60	73		4	1		25	7	3		58	169		
Sub Total		239	0	22	4	0	122	43	25	2	235	692		
17	00-15	64	1	3	1		32	11	7	1	71	191		
	15-30	54	1	1	1		30	10	4	1	68	170		
	30-45	60	2	3			35	9	4	2	73	188		
	45-60	41		3			19	8	4		48	123		
Sub Total		219	4	10	2	0	116	38	19	4	260	672		
ROAD NAME:		KATIMA MULILO			STATION:		SL1		DIRECTION:		FROM GREAT NORTH			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
18	00-15	54		6	2		21	4	5	1	48	141		
	15-30	24		4			11	5	1		53	98		
	30-45	59		3	2		18	6	2		67	157		
	45-60	49		5	1		14	5	4	1	47	126		
Sub Total		186	0	18	5	0	64	20	12	2	215	522		
19	00-15	38		2			13	5			47	105		
	15-30	46		3			18	4	3		55	129		
	30-45	26		5	2	1	10	4	2	1	24	75		
	45-60	28		3			7	1	1	2	22	64		
Sub Total		138	0	13	2	1	48	14	6	3	148	373		
20	00-15	26		4			9	1		1	29	70		
	15-30	24		4			7	2	2		14	53		
	30-45	27		3			6	3	1		17	57		
	45-60	25		3	2		14				37	81		
Sub Total		102	0	14	2	0	36	6	3	1	97	261		
21	00-15	33		4	1		8	1			20	67		
	15-30	19					9	1			9	38		
	30-45	21		1	1		3				8	34		
	45-60	22		3	1		8				11	45		
Sub Total		95	0	8	3	0	28	2	0	0	48	184		
Total		3568	9	240	43	6	1166	547	215	63	3436	9293		

表 3.28 スクリーンライン調査結果(SL1_to West_06:00-13:00)

ROAD NAME:		KATIMA MULILO			STATION:		SL1	DIRECTION:		TO GREAT NORTH			Total
Hours		Car			Light		Medium	Heavy	Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
6	00-15	13	0	2	1	0	6	2	3	1	18	46	
	15-30	21	0	2	0	0	11	1			18	53	
	30-45	21	0	2	4	0	11	3	1		14	56	
	45-60	38	0	5	1	0	16	3	4	1	18	86	
Sub Total		93	0	11	6	0	44	9	8	2	68	241	
7	00-15	90	1	3	1		46	4	3		13	161	
	15-30	97		4			34	5	1		14	155	
	30-45	110		3	1		32	5	3		16	170	
	45-60	98					31	7	3		10	149	
Sub Total		395	1	10	2	0	143	21	10	0	53	635	
8	00-15	100	3	5			42	11	4		12	177	
	15-30	66		4			24	8	3		18	123	
	30-45	63		1	1		29	15	2		9	120	
	45-60	64		4	2		23	8	8		6	115	
Sub Total		293	3	14	3	0	118	42	17	0	45	535	
9	00-15	69		2			22	3	3	2	7	108	
	15-30	47		1		1	23	3	6	1	11	93	
	30-45	57		4	1	1	25	10	5		9	112	
	45-60	42		2	1		21	7	4	1	3	81	
Sub Total		215	0	9	2	2	91	23	18	4	30	394	
ROAD NAME:		KATIMA MULILO			STATION:		SL1	DIRECTION:		TO GREAT NORTH			Total
Hours		Car			Light		Medium	Heavy	Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
10	00-15	49			1		24	9	5	2	9	99	
	15-30	41		1			17	6	3		8	76	
	30-45	51		1			36	12	9	3	8	120	
	45-60	61		2	1		29	12	3	3	12	123	
Sub Total		202	0	4	2	0	106	39	20	8	37	418	
11	00-15	46	1	1			18	7	5	3	3	84	
	15-30	37					22	7	8	8	12	94	
	30-45	53		1			20	8	6	1	15	104	
	45-60	60		4	2		23	7	7	1	17	121	
Sub Total		196	1	6	2	0	83	29	26	13	47	403	
12	00-15	64		1			35	16	12	1	12	141	
	15-30	54		3			24	11	3		10	105	
	30-45	75		4	1		41	11	8	1	6	147	
	45-60	64		5			22	9	8	2	7	117	
Sub Total		257	0	13	1	0	122	47	31	4	35	510	
13	00-15	59	1	5	2		21	6	5	2	12	113	
	15-30	52		3	1		28	9	5	2	2	102	
	30-45	69		2	1		21	15	11	1	9	129	
	45-60	55		2			24	12	7		12	112	
Sub Total		235	1	12	4	0	94	42	28	5	35	456	

表 3.29 スクリーンライン調査結果(SL1_to West_14:00-21:00)

ROAD NAME:		KATIMA MULILO			STATION:		SL1	DIRECTION:		FROM GREAT NORTH		Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated Bicycle	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer			
												
14	00-15	48		4	1		26	15	9		5	108
	15-30	58		4			19	11	12	3	6	113
	30-45	61		5			21	21	6		4	118
	45-60	54	1	4			28	7	6	1	13	112
Sub Total		221	1	17	1	0	92	54	33	4	28	451
15	00-15	62		1			34	16	5	2	8	128
	15-30	65	1	4	1		29	7	7	2	19	135
	30-45	54	1	6	2		22	11	7	4	14	121
	45-60	70		2	1	1	24	11	4	2	10	125
Sub Total		251	2	13	4	1	109	45	23	10	51	509
16	00-15	52		4	2	1	25	9	11	1	13	118
	15-30	58		2			25	16	7	6	18	132
	30-45	58		4			23	10	7		24	128
	45-60	50		2			20	7	12	3	21	115
Sub Total		218	0	12	2	1	93	42	37	10	76	491
17	00-15	80		9			27	4	8	3	31	162
	15-30	85	1	6			31	17	10	4	34	188
	30-45	88		2	1		36	10	5		13	155
	45-60	100	2	7	3		38	12	3	3	30	198
Sub Total		353	3	24	4	0	132	43	26	10	108	703
ROAD NAME:		KATIMA MULILO			STATION:		SL1	DIRECTION:		FROM GREAT NORTH		Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated Bicycle	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer			
												
18	00-15	90		3	3		27	8	3	1	17	152
	15-30	81		7	1	1	23	4	2	2	32	153
	30-45	60		3			22	4	2	2	39	132
	45-60	62		1			27	6	4	2	19	121
Sub Total		293	0	14	4	1	99	22	11	7	107	558
19	00-15	57		1			11	10	2	1	21	103
	15-30	49		3	1		17	3	7	2	10	92
	30-45	54		5	1		18	3	2	1	20	104
	45-60	29		2			11	1	2		9	54
Sub Total		189	0	11	2	0	57	17	13	4	60	353
20	00-15	39		1			14	1	2		11	68
	15-30	49		1	1		13	2	2		19	87
	30-45	35			1		15	4			2	57
	45-60	32					5	5			5	47
Sub Total		155	0	2	2	0	47	12	4	0	37	259
21	00-15	38		1	1		10	3	1		9	63
	15-30	19		2			6	3	2		6	38
	30-45	23		1			7					31
	45-60	27					5	1			1	34
Sub Total		107	0	4	1	0	28	7	3	0	16	166
Total		3673	12	176	42	5	1458	494	308	81	833	7082

表 3.30 スクリーンライン調査結果(SL2_to East,06:00-13:00)

ROAD NAME:		MAKISHI RD			STATION:		SL2	DIRECTION:		TO GRE AT EAST		
Hours		Car			Light		Medium	Heavy	Atticulated		Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle		Bicycle
												
6	00-15	6					2	2			3	13
	15-30	16					10			1	5	32
	30-45	34		3			6		1	2	5	51
	45-60	39		7	1	1	13			2	6	69
Sub Total		95	0	10	1	1	31	2	1	5	19	165
7	00-15	62		8			26		2	2	7	107
	15-30	82		8			20	2	1		8	121
	30-45	63		8			28	5	1	1	13	119
	45-60	83		3			27	3	3	2	10	131
Sub Total		290	0	27	0	0	101	10	7	5	38	478
8	00-15	87	1	5			18	7	1	2	18	139
	15-30	58		9			12	7	1	1	4	92
	30-45	55		8			17	5	3		9	97
	45-60	44		10			19	5	1	1	11	91
Sub Total		244	1	32	0	0	66	24	6	4	42	419
9	00-15	42		4	1		14	2	3	1	7	74
	15-30	41		9			12	6	3	1	12	84
	30-45	50		7			20	8	2		6	93
	45-60	59		5			16	5	1	1	22	109
Sub Total		192	0	25	1	0	62	21	9	3	47	360
ROAD NAME:		MAKISHI RD			STATION:		SL2	DIRECTION:		TO GRE AT EAST		
Hours		Car			Light		Medium	Heavy	Atticulated		Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle		Bicycle
												
10	00-15	52		6			27	6	3	1	9	104
	15-30	37		2			19	5	3			66
	30-45	52		3			24		5	1		85
	45-60	62		11			10	8	3		2	96
Sub Total		203	0	22	0	0	80	19	14	2	11	351
11	00-15	63	1	7			23	11	5	1		111
	15-30	65		11			40	4	3	1	2	126
	30-45	33		7			14			1	3	58
	45-60	51	1	6			24	5	5		1	93
Sub Total		212	2	31	0	0	101	20	13	3	6	388
12	00-15	60		4			15	4	5	1	3	92
	15-30	75		10			38	2	1	1	2	129
	30-45	65		8	1		21	10	2	1	3	111
	45-60	44		10			35	4	2	1	2	98
Sub Total		244	0	32	1	0	109	20	10	4	10	430
13	00-15	52		12		1	29	6	3	1	1	105
	15-30	60		6	1		17	2	4	1	1	92
	30-45	38		8	1		18	4	3	1	10	83
	45-60	46		7			27	6	1	2	5	94
Sub Total		196	0	33	2	1	91	18	11	5	17	374

表 3.31 スクリーンライン調査結果(SL2_to East,14:00-21:00)

ROAD NAME:		MAKISHI RD			STATION:		SL2	DIRECTION:		TO GREAT EAST		Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle	
												
14	00-15	32		5			27	10	1	2	27	104
	15-30	35		2			36	13		4	19	109
	30-45	55		8	1		30	6		4	42	146
	45-60	42		11			27	7	3	1	34	125
Sub Total		164	0	26	1	0	120	36	4	11	122	484
15	00-15	41	1	4			32	5			41	124
	15-30	42		4			37	6		1	53	143
	30-45	49		13			32	3	2	2	27	128
	45-60	47		4		1	34	6	1	1	47	141
Sub Total		179	1	25	0	1	135	20	3	4	168	536
16	00-15	47		7			31	4		1	16	106
	15-30	51		7	1		57	5	1	2	23	147
	30-45	45		1	2		44	5		5	24	126
	45-60	50		7			41	1	2		30	131
Sub Total		193	0	22	3	0	173	15	3	8	93	510
17	00-15	61		4			48	4		3	31	151
	15-30	39		6			34	4			28	111
	30-45	38		8			36	8		1	23	114
	45-60	39		2			36	1		1	57	136
Sub Total		177	0	20	0	0	154	17	0	5	139	512
ROAD NAME:		MAKISHI RD			STATION:		SL2	DIRECTION:		TO GREAT EAST		Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle	
												
18	00-15	17		6			18	2		2	42	87
	15-30	23		3		1	17	2	1	2	39	88
	30-45	22		10			19	4			33	88
	45-60	25		3			11	1		1	21	62
Sub Total		87	0	22	0	1	65	9	1	5	135	325
19	00-15	26		4	1		9	3		1	26	70
	15-30	15	1	3			11			1	17	48
	30-45	27		3			15	1	1		24	71
	45-60	9		1			8			1	23	42
Sub Total		77	1	11	1	0	43	4	1	3	90	231
20	00-15	15		2			8				20	45
	15-30	10		2	1		6	1		1	15	36
	30-45	12		1			9				5	27
	45-60	11		1	1		4				16	33
Sub Total		48	0	6	2	0	27	1	0	1	56	141
21	00-15	6		2			3	1			12	24
	15-30	8		3			5	1			3	20
	30-45	5					6				5	16
	45-60	11					3	1			2	17
Sub Total		30	0	5	0	0	17	3	0	0	22	77
Total		2631	5	349	12	4	1375	239	83	68	1015	5781

表 3.32 スクリーンライン調査結果(SL2_to West_06:00-13:00)

ROAD NAME:		MAKISHI			STATION:		SL2	DIRECTION:		TO GREAT NORTH			Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Bicycle		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer				
													
6	00-15	2	5	2	1		5	1	1	1	5	23	
	15-30	6	3	1			2				4	16	
	30-45	3	2				1	1			5	12	
	45-60	13		2			1		1		2	19	
Sub Total		24	10	5	1	0	9	2	2	1	16	70	
7	00-15	18	3	3			2				6	32	
	15-30	28		6			17	2	1	1	4	59	
	30-45	28	1	2			16	1			43	91	
	45-60	52	3	5			26	2	1	1	34	124	
Sub Total		126	7	16	0	0	61	5	2	2	87	306	
8	00-15	40	5	3			20	2	2	1	30	103	
	15-30	37	6	3			20	1	1		21	89	
	30-45	35	7	6			21	4	1		13	87	
	45-60	33	20	3			20	3	5	3	21	108	
Sub Total		145	38	15	0	0	81	10	9	4	85	387	
9	00-15	35	10	5			28	8	1	1	23	111	
	15-30	32	13	3			28	5	2		15	98	
	30-45	23	12	4	1		21	3	2		24	90	
	45-60	24	11	6	1	1	24	3	5		23	98	
Sub Total		114	46	18	2	1	101	19	10	1	85	397	
ROAD NAME:		MAKISHI			STATION:		SL2	DIRECTION:		TO GREAT NORTH			Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Bicycle		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer				
													
10	00-15	23	10	5			18	7	3		19	85	
	15-30	33	9	3			30	4	4	1	25	109	
	30-45	37	14	3			29	6	4		19	112	
	45-60	32	12	3			25	5	5		17	99	
Sub Total		125	45	14	0	0	102	22	16	1	80	405	
11	00-15	34	10	9			23	3	5	1	28	111	
	15-30	41	11	5			34	5	9		20	125	
	30-45	50	11	6			32	10	4	1	17	131	
	45-60	34	19	13			48	9	6	4	17	150	
Sub Total		159	51	33	0	0	137	27	24	6	80	517	
12	00-15	45	17	14	2		41	4	4	1	20	148	
	15-30	48	17	12		1	45	6	3	2	16	150	
	30-45	58	14	3			45	4	8	3	13	148	
	45-60	51	16	16			32	6	2		24	147	
Sub Total		202	64	45	2	1	163	20	17	6	73	593	
13	00-15	56	8	12			20	5	6	2	4	113	
	15-30	39	19	8		1	38	4	2	1	21	133	
	30-45	43	1	5			25	5	3	2	9	93	
	45-60	44	12	4		1	24	6	5	1	23	120	
Sub Total		182	40	29	0	2	107	20	16	6	57	459	

表 3.33 スクリーンライン調査結果(SL2_to West_14:00-21:00)

ROAD NAME:		MAKISHI			STATION:		SL2	DIRECTION:		TO GREAT NORTH		Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated Bicycle	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer			
												
14	00-15	49	4				26	5			23	107
	15-30	59	4		1		30	2	2	3	27	128
	30-45	61	4				44	6		4	19	138
	45-60	43	4				29	2		2	23	103
Sub Total		212	16	0	1	0	129	15	2	9	92	476
15	00-15	28		7			30	12	1	3	28	109
	15-30	44		4			27	11		1	28	115
	30-45	58		6	1		29	13		9	31	145
	45-60	49		9			47	16	1	2	37	161
Sub Total		177	0	26	1	0	133	52	2	15	124	530
16	00-15	62		8	1		37	12	1	2	16	139
	15-30	53	2	2			38	10	1	3	29	138
	30-45	52		6		1	30	6		1	22	118
	45-60	61		15			41	7	1	2	36	163
Sub Total		228	2	31	1	1	146	35	3	8	103	558
17	00-15	43		12			38	10	1	4	18	124
	15-30	82		10			34	4		3	22	155
	30-45	73		2			32	5	1	1	20	134
	45-60	47	1	6	1		36	9	1	3	15	119
Sub Total		245	1	30	1	0	138	28	3	11	75	532
ROAD NAME:		MAKISHI			STATION:		SL2	DIRECTION:		TO GREAT NORTH		Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated Bicycle	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer			
												
18	00-15	54		4	1		27	3		1	17	107
	15-30	36		5			24	4			26	95
	30-45	38		4			13	3			28	86
	45-60	35	1	5			19	3	1		20	84
Sub Total		163	1	18	1	0	83	13	1	1	91	372
19	00-15	38		4	1		21	1		1	28	94
	15-30	48		6			29		1		20	104
	30-45	29		2			11	3			14	59
	45-60	22		4			7	2		1	8	44
Sub Total		137	0	16	1	0	68	6	1	2	70	301
20	00-15	26		2			13	2			10	53
	15-30	11		3			8				16	38
	30-45	14		4			4	1			9	32
	45-60	13		1			2			1	17	34
Sub Total		64	0	10	0	0	27	3	0	1	52	157
21	00-15	12		1			6	1		1	4	25
	15-30	4		2			2	1			2	11
	30-45	9					9				2	20
	45-60	9					1				3	13
Sub Total		34	0	3	0	0	18	2	0	1	11	69
Total		2337	321	309	11	5	1503	279	108	75	1181	6129

表 3.34 スクリーンライン調査結果(SL3_to East,06:00-13:00)

ROAD NAME:		GREAT EAST ROAD			STATION:		SL3		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated			Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
6	00-15	13		17	3		9	5	5		1	53	
	15-30	32		34	4		23	5	6			104	
	30-45	63		35	7		27	4	5		11	152	
	45-60	89		44	6	1	48	8	6	2	8	212	
Sub Total		197	0	130	20	1	107	22	22	2	20	521	
7	00-15	90		54	11	2	70	7	8	2	9	253	
	15-30	66		46	7		44	4	3	3	11	184	
	30-45	116		42	16		49	10	4	6		243	
	45-60	61		35	8	1	20	5	6	6	27	169	
Sub Total		333	0	177	42	3	183	26	21	17	47	849	
8	00-15	76		41	4		50	10	10	1	14	206	
	15-30	79		30	9		33	7	13	5	9	185	
	30-45	75		34	4		30	5	7	4	11	170	
	45-60	74		35	5		385	17	4	5	11	536	
Sub Total		304	0	140	22	0	498	39	34	15	45	1097	
9	00-15	61		30	9	1	38	6	7	5	1	158	
	15-30	99		33	4		83	17	8	3	9	256	
	30-45	79		30	2		35	15	6	4	7	178	
	45-60	92		32	2		42	11	7	4	5	195	
Sub Total		331	0	125	17	1	198	49	28	16	22	787	
ROAD NAME:		GREAT EAST ROAD			STATION:		SL3		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated			Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
10	00-15	76	1	17	3		60	13	5	10	7	192	
	15-30	90		24	2		45	13	4	5	1	184	
	30-45	89		24	14		32	13	10	3	5	190	
	45-60	87		30			47	7	6	4	4	185	
Sub Total		342	1	95	19	0	184	46	25	22	17	751	
11	00-15	64	1	21	8		42	12	5	2	2	157	
	15-30	97	1	23	3		50	9	6	7	4	200	
	30-45	78		20	7		63	9	6	4	1	188	
	45-60	204		31	4		66	16		3	8	332	
Sub Total		443	2	95	22	0	221	46	17	16	15	877	
12	00-15	97		40	8		46	13	6	3	1	214	
	15-30	80		43	5		62	9	5	5	5	214	
	30-45	115		50	33	2	68	18	8	8		302	
	45-60	103		34	12	2	60	11	6	2	1	231	
Sub Total		395	0	167	58	4	236	51	25	18	7	961	
13	00-15	109		52	3		75	5	4	5	2	255	
	15-30	90		18	7	2	60	17	8	2	1	205	
	30-45	84		33	5		53	11	9	2		197	
	45-60	89		52	8		60	13	8	1	2	233	
Sub Total		372	0	155	23	2	248	46	29	10	5	890	

表 3.35 スクリーンライン調査結果(SL3_to East_14:00-21:00)

ROAD NAME:		GREAT EAST ROAD			STATION:		SL3		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
14	00-15	101		46	4		68	12	9	2	20	262	
	15-30	135		37	5		70	15	5	3	15	285	
	30-45	102		40	4		98	16	3	4	35	302	
	45-60	81		35	5		98	19	7	8	20	273	
Sub Total		419	0	158	18	0	334	62	24	17	90	1122	
15	00-15	80		38	3		75	21	9	4	38	288	
	15-30	95		40	5		76	14	6	2	4	242	
	30-45	101		37	6		92	18		3	7	264	
	45-60	90		37	2			16	3	7	7	162	
Sub Total		366	0	152	16	0	243	69	18	16	56	936	
16	00-15	99		43	10		93	9	9	3	8	274	
	15-30	130		35	6		112	14	9	4	4	314	
	30-45	92		32	6		82	15	3	4	9	243	
	45-60	165		43	8		104	13	6	6	12	357	
Sub Total		486	0	153	30	0	391	51	27	17	33	1188	
17	00-15	168		40	10		130	11	6	3	2	370	
	15-30	152		40	12		113	12	3	5	11	348	
	30-45	128		53	5		89	14	10	1	13	313	
	45-60	102		41	4		100	9	3	4	24	287	
Sub Total		550	0	174	31	0	432	46	22	13	50	1318	
ROAD NAME:		GREAT EAST ROAD			STATION:		SL3		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
18	00-15	101		34	8		72	14	2	4	37	272	
	15-30	104		38	12		45	7	2	2	37	247	
	30-45	100		38	7		37	7	8	3	34	234	
	45-60	100		35	4		34	6	4	3	20	206	
Sub Total		405	0	145	31	0	188	34	16	12	128	959	
19	00-15	80		21	8		44	2	1		14	170	
	15-30	62		23	10		41	6	1		16	159	
	30-45	40		17	5	1	13	4	1	1	10	92	
	45-60	41		13	4		38	11	3	2	7	119	
Sub Total		223	0	74	27	1	136	23	6	3	47	540	
20	00-15	30		20	6		44	1	5	1	8	115	
	15-30	24		15	4		41	4	5		4	97	
	30-45	29		5	1		13	1	1	1	2	53	
	45-60	34		11	3		38	4	3	1	1	95	
Sub Total		117	0	51	14	0	136	10	14	3	15	360	
21	00-15	39		10		1	18	1	2	1		72	
	15-30	40		8	1		12	4	3		1	69	
	30-45	12		2			17	5	4			40	
	45-60	12		1	1		12		2			28	
Sub Total		103	0	21	2	1	59	10	11	1	1	209	
Total		5386	3	2012	392	13	3794	630	339	198	598	13365	

表 3.36 スクリーンライン調査結果(SL3_to West_06:00-13:00)

ROAD NAME:		GREAT EAST ROAD			STATION:		SL 3		DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated					
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	Total		
														
6	00-15	21		22	2		20		3	1	5	74		
	15-30	46		41	4		30	3	2	1	5	132		
	30-45	63	1	38	7	1	62	4	7		15	196		
	45-60			57	5		96	10	5		35	208		
Sub Total		130	1	156	18	1	208	17	17	2	60	610		
7	00-15	107		85	7		98	3	7	1	50	358		
	15-30	187		35	8		138	7	5	4	75	457		
	30-45	158		79	14		25	7	7	3	60	353		
	45-60	127		25	12	1	92	7	5	2	55	326		
Sub Total		579	0	224	41	1	351	24	24	10	240	1494		
8	00-15	120	15	57	12		90	15	9	3	75	396		
	15-30	110	2	66	12		70	13	6	2	35	316		
	30-45	136	2	58	18		90	18	9	2	34	387		
	45-60	148	1	50	20		105	3	9	3	47	388		
Sub Total		514	20	231	62	0	355	49	33	10	191	1465		
9	00-15	136	1	50	5		101	7	5	1	36	342		
	15-30	130	3	60	6		88	10	6	4	43	348		
	30-45	128	2	35	7		85	13	6	6	22	304		
	45-60	120		30	7		105	18	4	6	32	322		
Sub Total		514	6	175	25	0	377	48	21	17	133	1316		
ROAD NAME:		GREAT EAST ROAD			STATION:		SL 3		DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated					
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	Total		
														
10	00-15	120	45	48	11		80	15	6	6	17	348		
	15-30	125		77	5		106	16	8	3	31	371		
	30-45	150		59	7		127	10	8	5	28	394		
	45-60	147		55	7		90	14	6	1	45	365		
Sub Total		542	45	239	30	0	403	55	28	15	121	1478		
11	00-15	191		48	12		51	20	2	2	32	358		
	15-30	195		50	12	1	65	17	4	2	11	357		
	30-45	150		38	7		85	9	5	2	23	319		
	45-60	142		63	5		65	16	5	1	15	312		
Sub Total		678	0	199	36	1	266	62	16	7	81	1346		
12	00-15	212		35	5		60	10	6	1	18	347		
	15-30	190		43	13		81	3	3	4	25	362		
	30-45	244		46	4	1	45	10	11	2	26	389		
	45-60	127			4		86	19	4	3	16	259		
Sub Total		773	0	124	26	1	272	42	24	10	85	1357		
13	00-15	126	1	42	8		92	22	11	8	32	342		
	15-30	129		36	6		65	16	5	3	16	276		
	30-45	118		42	11		92	8	5	2	20	298		
	45-60	80		56	3		58	11	1	2	18	229		
Sub Total		453	1	176	28	0	307	57	22	15	86	1145		

表 3.37 スクリーンライン調査結果(SL3_to West_14:00-21:00)

ROAD NAME:		GREAT EAST ROAD			STATION:		SL 3	DIRECTION:		TOTOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
14	00-15	117	15	40	8	1	93	17	7	3	12	313		
	15-30	65	31	46	5		128	27	4	5	20	331		
	30-45	80	27	38	7		110	28	2	8	23	321		
	45-60	72	13	52	14		108	20	9	7	24	319		
Sub Total		334	86	176	34	1	439	90	22	23	79	1284		
15	00-15	110	19	48	8	2	73	21	6	3	37	327		
	15-30	68	19	39	10	1	90	22	6	6	43	302		
	30-45	65	10	35	9		55	15	1	8	37	235		
	45-60	80	9	46	8		64	23	8	9	27	274		
Sub Total		321	57	168	35	3	282	81	21	26	144	1138		
16	00-15	63	28	55	9		58	24	5	10	63	311		
	15-30	77	15	43	11		75	20	9	7	35	292		
	30-45	73	25	57	8		65	14	9	5	35	291		
	45-60	53	29	54	10		60	24	6	7	33	276		
Sub Total		266	95	209	38	0	256	82	29	29	166	1170		
17	00-15	93	15	52	13	1	50	17	8	7	51	307		
	15-30	70	5	47	11		72	10	1	9	87	312		
	30-45	62	24	55	8		52	14	8	7	53	283		
	45-60	48	10	52	15		60	16	6	4	48	259		
Sub Total		273	54	206	47	1	234	57	23	27	239	1161		
ROAD NAME:		GREAT EAST ROAD			STATION:		SL 3	DIRECTION:		TOTOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
18	00-15	51	23	45	6	2	40	13	6	2	32	220		
	15-30	43	17	50	10		43	11	9	4	18	205		
	30-45	45	14	43	15		58	8	11	4	16	214		
	45-60			46	23	2		12	2	3	20	108		
Sub Total		139	54	184	54	4	141	44	28	13	86	747		
19	00-15	40	20	37	10		41	7	4	1	8	168		
	15-30	71	21	37	15		65	3	3	5	7	227		
	30-45	43	5	33	9		30	9	4	2	4	139		
	45-60	40	6	16	9		16	6	3		3	99		
Sub Total		194	52	123	43	0	152	25	14	8	22	633		
20	00-15	40	2	11	8		23	5	3	2	2	96		
	15-30	23	3	15	8		22	3	3	1	1	79		
	30-45	35	7	16	8		23	4		2	2	97		
	45-60	41	1	14			18	4		2	2	82		
Sub Total		139	13	56	24	0	86	16	6	7	7	354		
21	00-15	33	1	8	1		20	2	2	2	2	71		
	15-30	30	1	15			12	3	4	1		66		
	30-45	30	1	5			27	2	3	1		69		
	45-60	13		5			14		5	1		38		
Sub Total		106	3	33	1	0	73	7	14	5	2	244		
Total		5855	487	2679	542	13	4202	756	342	224	1742	16942		

表 3.38 スクリーンライン調査結果(SL4_to East_06:00-13:00)

ROAD NAME:		CHURCHROAD			STATION:		SL4		DIRECTION:		FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
6	00-15	30		5	1		10		1	1	15	63		
	15-30	20	7	2	1		16	3	2	2	11	64		
	30-45	55	2	2	1	1	31	2		1	17	112		
	45-60	80	2	13		1	51	5	1	2	20	175		
Sub Total		185	11	22	3	2	108	10	4	6	63	414		
7	00-15	90	1	13	2	3	55	5			7	178		
	15-30	90		12	5		71	1	3			182		
	30-45	115		5	1		28		3	2	3	157		
	45-60	103		8		2	60			1	1	175		
Sub Total		398	1	38	8	5	214	6	6	3	11	690		
8	00-15	137	3	17	5	1	74	4	1	6	40	288		
	15-30	123	2	28	1		70	5		3	31	283		
	30-45	138	5	48	4	1	51	7	5	3	41	303		
	45-60	123		33	6	1	51	4		1	50	289		
Sub Total		521	10	126	16	3	246	20	6	13	162	1123		
9	00-15	147		33	2		30	6	2	5	6	231		
	15-30	105		21	7		23	3	1	1		161		
	30-45	120		32	2	1	41	5	5	5	3	214		
	45-60	140		27	8		58	7	3	2	1	246		
Sub Total		512	0	113	19	1	152	21	11	13	10	852		
ROAD NAME:		CHURCHROAD			STATION:		SL4		DIRECTION:		FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
10	00-15	162		36	1	1	61	8	1	7	21	298		
	15-30	157	3	23	1	1	58	10	5	7	21	286		
	30-45	132		19	3	1	60	3	3	2	22	245		
	45-60	162	1	26	2		53	4	2	15	27	292		
Sub Total		613	4	104	7	3	232	25	11	31	91	1121		
11	00-15	120	1	18	1		62	16	2	3	6	229		
	15-30	114		17	1		69	2	3	1	7	214		
	30-45	120		10	1	1	71	2	3	6	3	217		
	45-60	140		7		1	70	7	1	3	11	240		
Sub Total		494	1	52	3	2	272	27	9	13	27	900		
12	00-15	179	1	20	1		67	11	1	5	11	296		
	15-30	163	2	25	2	1	65	12	2	9	21	302		
	30-45	173		24	2	1	48	5	4	8	34	299		
	45-60	183	2	23	2		83	13	2	4	21	333		
Sub Total		698	5	92	7	2	263	41	9	26	87	1230		
13	00-15	126		18	1	1	91	5	5	5	2	254		
	15-30	117		12	2	2	56	6	5	6		208		
	30-45	117		5			52	2	2	2	7	187		
	45-60	116		14		1	71	8	1			211		
Sub Total		476	0	49	3	4	270	21	13	13	9	858		

表 3.39 スクリーンライン調査結果(SL4 to East 14:00-21:00)

ROAD NAME:		CHURCHROAD			STATION:		SL4		DIRECTION:		FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
14	00-15	145		27	1	2	67	4	0	4	187	437		
	15-30	184		21	0	2	48	11	1	6	170	443		
	30-45	164		28	2	1	50	6	4	3	147	405		
	45-60	182	1	19	1	1	42	2	4	9	165	426		
Sub Total		675	1	95	4	6	207	23	9	22	669	1711		
15	00-15	198	1	14	2	2	38	7	0	4	127	393		
	15-30	203	1	30	0	2	47	10	2	3	157	455		
	30-45	195	0	33	0	3	49	10	4	4	143	441		
	45-60	210	5	23	2	4	40	4	4	1	150	443		
Sub Total		806	7	100	4	11	174	31	10	12	577	1732		
16	00-15	197	1	28	2	1	43	6	2	6	163	449		
	15-30	259	1	27	0	6	54	3	2	6	152	510		
	30-45	298	0	40	1	1	55	2	3	5	228	633		
	45-60	249	0	32	1	2	49	4	1	2	130	470		
Sub Total		1003	2	127	4	10	201	15	8	19	673	2062		
17	00-15	352	1	95	7	3	115	3	2	2	101	681		
	15-30	262	0	65	2	0	115	9	0	2	75	530		
	30-45	280	0	40	1	4	55	10	0	3	108	501		
	45-60	186	0	41	3	4	38	3	1	1	167	444		
Sub Total		1080	1	241	13	11	323	25	3	8	451	2156		
ROAD NAME:		CHURCHROAD			STATION:		SL4		DIRECTION:		FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
18	00-15	175	0	30	1	2	58	1	5	5	142	419		
	15-30	111	0	36	2	5	36	2	0	0	220	412		
	30-45	157	2	29	5	5	40	0	0	3	120	361		
	45-60	123	0	16	0	4	58	1	0	0	62	264		
Sub Total		566	2	111	8	16	192	4	5	8	544	1456		
19	00-15	115	0	16	0	10	38	2	0	1	142	322		
	15-30	72	0	11	0	2	20	2	1	0	86	194		
	30-45	67	0	9	0	3	14	1	0	0	43	137		
	45-60	46	0	8	0	3	11	2	0	0	5	75		
Sub Total		300	0	44	0	18	81	7	1	1	276	728		
20	00-15	40	0	3	0	5	8	0	1	0	36	93		
	15-30	42	0	10	1	4	10	1	0	1	29	98		
	30-45	28	0	14	0	0	22	1	0	0	19	84		
	45-60	31	0	3	1	4	6	0	0	0	18	63		
Sub Total		141	0	30	2	13	46	2	1	1	102	338		
21	00-15	17	0	4	2	1	6	1	0	0	9	40		
	15-30	19	0	1	0	2	7	1	0	0	10	40		
	30-45	21	0	4	0	4	5	0	1	0	4	39		
	45-60	20	0	0	0	0	3	0	0	0	4	27		
Sub Total		77	0	9	2	7	21	2	1	0	27	146		
Total		8545	45	1353	103	114	3002	280	107	189	3779	17517		

表 3.40 スクリーンライン調査結果(SL4_to West_06:00-13:00)

ROAD NAME:		CHURCHROAD			STATION:		SL4		DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated					
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle	Total		
														
6	00-15	16		6	6	2	6						36	
	15-30	36		11	2	2	15	2		1	3	72		
	30-45	38		5	2	1	15	4		1	3	67		
	45-60	75		6	2		35			1	65	184		
Sub Total		163	0	28	12	5	71	6	0	3	71	359		
7	00-15	110		5	1	1	48	5	1		30	199		
	15-30	120			3	2	75	3			60	283		
	30-45	110		7	5		60		1		55	238		
	45-60	165		3	1	3	55	4	1	3	45	280		
Sub Total		505	0	15	10	6	236	12	3	3	190	980		
8	00-15	120		13	1	1	60	1		3	50	249		
	15-30	104		20	2	1	45	4			50	226		
	30-45	90		22	1	2	50	3			30	198		
	45-60	85		24	6	3	30	9		1	40	198		
Sub Total		399	0	79	10	7	185	17	0	4	170	871		
9	00-15	112	6	55	18	1	80	6	1	13	75	387		
	15-30	140	13	70	17	1	71	7		17	75	411		
	30-45	106	7	33	3	3	48	20		12	90	322		
	45-60	92	3	23	7	2	31	4	1	12	115	290		
Sub Total		450	29	181	45	7	230	37	2	54	355	1390		
ROAD NAME:		CHURCHROAD			STATION:		SL4		DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated					
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle	Total		
														
10	00-15	131		25	3	2	66	4	1	1	43	276		
	15-30	160		36	3	3	47	7	1		38	295		
	30-45	159		21	1	6	47	9			50	293		
	45-60	138		21			49	7			71	284		
Sub Total		586	0	103	7	11	209	27	2	1	202	1148		
11	00-15	55	2	17	2	1	45	5	1	6	75	209		
	15-30	105	8	29	1	1	60	8	5	5	85	307		
	30-45	103	6	20	2	4	67	4	2	7	105	320		
	45-60	55	4	14	2	1	61	5	1	6	45	194		
Sub Total		318	20	80	7	7	233	22	9	24	310	1030		
12	00-15	150		17	1		52	11			71	302		
	15-30	108		12	2	1	20	7	3		40	193		
	30-45	97		22	1	3	40	8	1		85	257		
	45-60	125		15	1	1	73	1			75	291		
Sub Total		480	0	66	5	5	185	27	4	0	271	1043		
13	00-15	65	3	18	2		75	16	2	3	65	249		
	15-30	85	3	12	2	5	48	7		7	105	274		
	30-45	85		15	2	3	51	8	2	3	65	234		
	45-60	73	2	6	2	4	43	12		2	60	204		
Sub Total		308	8	51	8	12	217	43	4	15	295	961		

表 3.41 スクリーンライン調査結果(SL4_to West_14:00-21:00)

ROAD NAME:		CHURCHROAD			STATION:	SL4		DIRECTION:	TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
14	00-15	127	15	7	2		67	18		5	140	381
	15-30	129	1	6	6	1	60	7		9	80	299
	30-45	125	21	8	2	2	59	7		8	120	352
	45-60	128	14	9	3	1	65	14		1	100	333
Sub Total		507	51	30	13	4	251	46	0	23	440	1365
15	00-15	109	37	12		1	70	19	1	9	100	358
	15-30	101	16	13		4	59	16		3	90	302
	30-45	100	34	13	2	1	63	18		4	70	305
	45-60	125	48	23	1	1	60	12		4	120	394
Sub Total		435	135	61	3	7	252	65	1	20	380	1359
16	00-15	160	23	7	2		45	15		2	80	334
	15-30	63	23	6		2	53	10		2	68	227
	30-45	100	26	4		1	43	10			40	224
	45-60	68	12	8	1	4	24	7		3	50	177
Sub Total		391	84	25	3	7	165	42	0	7	238	962
17	00-15	114	29	7	2	3	50	4	1	3	60	273
	15-30	81	10	1	1	3	30	13		5	85	229
	30-45	104	28	5	7	5	44	12		1	100	306
	45-60	84	28	4	2	1	43	7		4	90	283
Sub Total		383	95	17	12	12	167	36	1	13	335	1071
ROAD NAME:		CHURCHROAD			STATION:	SL4		DIRECTION:	TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
18	00-15	55	22	9	1	4	24	7		1	40	163
	15-30	52	19	5		2	15	8		1	50	152
	30-45	50	41	8	3	2	28	8	1		90	229
	45-60	57	37	4			16	6			125	245
Sub Total		214	119	26	4	8	81	29	1	2	305	789
19	00-15	73	60	5			9	5	1	2	130	285
	15-30	40	20	3		2	15	1			120	201
	30-45	41	22	4		3	31	5		1	40	147
	45-60	72	10	3		2	14	5		1	50	157
Sub Total		226	112	15	0	7	69	16	1	4	340	790
20	00-15	17	10			1	8	4			60	100
	15-30	30	12			1	7	1			70	121
	30-45	25	14	4			9	1		1	60	114
	45-60	26	20	3		4	8	2			40	103
Sub Total		98	56	7	0	6	32	8	0	1	230	438
21	00-15	18	10	1		1	15	2			15	62
	15-30	10	11	1	2	1	11	1		1	17	55
	30-45	19	15	1		1	3	2			5	48
	45-60	7	5	2		5	1		1	1	2	24
Sub Total		54	41	5	2	8	30	5	1	2	39	187
Total		5517	750	789	141	119	2613	438	29	176	4171	14743

表 3.42 スクリーンライン調査結果(SL5_to East,06:00-13:00)

ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated			Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
6	00-15	65	1	90	12	1	50	4	1	1	9	234	
	15-30	72	5	65	8	2	25	7	6		10	200	
	30-45	75	6	63	18	1	55	4	6	1	3	232	
	45-60	92	6	85	17	1	30		5			236	
Sub Total		304	18	303	55	5	160	15	18	2	22	902	
7	00-15	87	8	105	15	6	70	15	15		135	456	
	15-30	101	2	105	13	2	66	7	5	2	145	448	
	30-45	81	5	72	16	1	63	9	8	1	135	391	
	45-60	83	1	45	4		47	3	5	2	135	325	
Sub Total		352	16	327	48	9	246	34	33	5	550	1620	
8	00-15	30	4	64	19		85	17	17	5	120	381	
	15-30	98	1	90	7		60	10	11	3	105	385	
	30-45	83	3	90	6	1	58	7	7	2	135	392	
	45-60	104	50	83	5	1	64	12	7	3	120	449	
Sub Total		315	58	327	37	2	267	46	42	13	480	1587	
9	00-15	92	4	67	4		40	7	9		90	313	
	15-30	93	8	83	7	2	65	1	3		90	352	
	30-45	105	7	90	10	1	60	9	6		90	378	
	45-60		10	78			63	6	16	6	90	289	
Sub Total		290	29	318	21	3	228	23	34	6	360	1312	
ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated			Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
10	00-15	94	9	63	5	2	65	17	2	2	105	364	
	15-30	105	12	75	7		60	10	7	4	90	370	
	30-45	100	9	74	2	1	70	8	7	4	90	365	
	45-60	99	10	75	6		60	7	13	6	105	381	
Sub Total		398	40	287	20	3	255	42	29	16	390	1480	
11	00-15	105	8	66	7		45	2	5	4	105	347	
	15-30	94	12	69	5		46	7	12	4	90	339	
	30-45	137	8	67	4	3	78	12	5	11	75	400	
	45-60	148	2	68	10		72	8	8	3	90	409	
Sub Total		484	30	270	26	3	241	29	30	22	360	1495	
12	00-15	125	5	65	3		57	7	12	8	105	387	
	15-30	116	4	71	7	1	65	4	8	6	90	372	
	30-45	105		59	7	1	90	3	6	7	90	368	
	45-60	118	2	79	5	1	97	4	8	9	90	413	
Sub Total		464	11	274	22	3	309	18	34	30	375	1540	
13	00-15	130	13	73	4	2	55	12	6	5	90	390	
	15-30	137	18	69	5	2	53	6	6	9	100	405	
	30-45	126	10	72	8		55	5	6	3	90	375	
	45-60	72	6	69	7		60	6	6	3	90	319	
Sub Total		465	47	283	24	4	223	29	24	20	370	1489	

表 3.43 スクリーンライン調査結果(SL5_to East,14:00-21:00)

ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle				
															
14	00-15	170		65	6	1	79	8	5	6	28	368			
	15-30	150		70	5	1	85	5	8	2	55	381			
	30-45	145		8	8		85	8	3	8	59	324			
	45-60	120		50	6	1	95	9	6	8	25	320			
Sub Total		585	0	193	25	3	344	30	22	24	167	1393			
15	00-15	90		41	7	2	105	9	7	7	32	300			
	15-30	60	1	50	4	1	100	8	12	10	51	297			
	30-45	89		49	5	2	90	3	7	10	57	312			
	45-60	89		56	10	2	100	9	9	10	42	327			
Sub Total		328	1	196	26	7	395	29	35	37	182	1236			
16	00-15	175		84	10	90	8	1	6	6	65	443			
	15-30	161		84	4	100	8	8	7	8	59	439			
	30-45	185	1	85	9	90	15	15	7	10	41	458			
	45-60	120		94	6	105	13	13	3	15	55	424			
Sub Total		641	1	347	29	385	42	37	23	39	220	1764			
17	00-15	200		90	10		105	8	8	14	65	500			
	15-30	205		96	12	1	90	9	1	7	28	449			
	30-45	131		60	8	1	97	5	5	8	41	356			
	45-60	179		103	12	3	145	5	4	4	42	497			
Sub Total		715	0	349	42	5	437	27	18	33	176	1802			
ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle				
															
18	00-15	176	1	75		2	90	5	6	3	15	373			
	15-30	110		79	6		75	8	3	2	30	313			
	30-45	120		79	5		75	5	1	3	47	335			
	45-60	85		50	9	2	74	3	6	1	20	250			
Sub Total		491	1	283	20	4	314	21	16	9	112	1271			
19	00-15	106	1	69	2	1	89	1		1	46	316			
	15-30	91		40	5		77	3	1	1	14	232			
	30-45	51	1	20	3		61	3	3	1	30	173			
	45-60	44	1	32	1		47	2	1	1	129	129			
Sub Total		292	3	161	11	1	274	9	5	4	90	850			
20	00-15	60		34	3	3	52	2	1			155			
	15-30	49		11	4	1	25	2		1	2	95			
	30-45	52		21		1	36	1	2	1	4	118			
	45-60	37		12	3		35		1	2		90			
Sub Total		198	0	78	10	5	148	5	4	4	6	458			
21	00-15	48		15	2	1	25	2		1	8	102			
	15-30	35		16	2	1	11	1	1		4	71			
	30-45	35		16	2	3	10				13	79			
	45-60	14		6	1		6					27			
Sub Total		132	0	53	7	5	52	3	1	1	25	279			

表 3.44 スクリーンライン調査結果(SL5_to East,22:00-05:00)

ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		FROM TOWN				Total
Hours		Car			Light		Medium	Heavy	Articulated		Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
22	00-15	27		5	1		10	2		1	2			48	
	15-30	8	1	3	1		6							19	
	30-45	18	1	4			4			1				28	
	45-60	6					7							13	
Sub Total		59	2	12	2	0	27	2	0	2	2			108	
23	00-15	10		1										11	
	15-30	8		2			11	2						23	
	30-45	13		2			12	1		1	1			30	
	45-60	12		1			7							20	
Sub Total		43	0	6	0	0	30	3	0	1	1			84	
0	00-15	8					4					1		13	
	15-30	10					6							16	
	30-45	6		2			5							13	
	45-60	9					2	1						12	
Sub Total		33	0	2	0	0	17	1	0	0	1			54	
1	00-15	3					4	1						8	
	15-30	9					1							10	
	30-45	5					8	1						14	
	45-60													0	
Sub Total		17	0	0	0	0	13	2	0	0	0			32	
ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		FROM TOWN				Total
Hours		Car			Light		Medium	Heavy	Articulated		Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
2	00-15	3					4							7	
	15-30	4		1			2							7	
	30-45	4					1							5	
	45-60	2												2	
Sub Total		13	0	1	0	0	7	0	0	0	0			21	
3	00-15	5					2							7	
	15-30	4		1			1				1			7	
	30-45	6		1			4							11	
	45-60	8		4			1			1				14	
Sub Total		23	0	6	0	0	8	0	0	1	1			39	
4	00-15	8		4			8	1			2			23	
	15-30	25	1	2			7							35	
	30-45	19	4	3		1	7	1			14			49	
	45-60	20		12			14	5		1	20			72	
Sub Total		72	5	21	0	1	36	7	0	1	36			179	
5	00-15	20		8		1	10			1	14			54	
	15-30	26	3	19	1		16	1		1	41			108	
	30-45	19	2	29	2		8	4			51			115	
	45-60	40		50	8		9	2		1	1			111	
Sub Total		105	5	106	11	1	43	7	0	3	107			388	
Total		6819	267	4203	436	449	4116	419	368	273	4033			21383	

表 3.45 スクリーンライン調査結果(SL5_to West_06:00-13:00)

ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		TOTOWN				Total
Hours		Car			Light		Medium		Heavy		Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
6	00-15	35	1	9	1		20	3	1	3	35	108			
	15-30	55	17	62	6	1	24	4	6	3	178				
	30-45	60	12	59	17		55	4	7	3	217				
	45-60	80	5	85	15	1	47	5	5	145	388				
Sub Total		230	35	215	39	2	146	16	19	3	186	891			
7	00-15	85	8	105	15	6	69	8	15		150	461			
	15-30	101	2	105	13	2	66	7	5	2	155	458			
	30-45	81	5	72	16	1	64	4	8	1	155	407			
	45-60	83	1	45	4		48	3	5	2	145	336			
Sub Total		350	16	327	48	9	247	22	33	5	605	1662			
8	00-15	89	4	64	19		80	17	12	5	125	415			
	15-30	103	1	89	7		60	10	12	3	150	435			
	30-45	78	3	90	6	1	50	7	8	2	125	370			
	45-60	104	50	83	5	1	56	12	9	3	120	443			
Sub Total		374	58	326	37	2	246	46	41	13	520	1663			
9	00-15	92	4	57	4		40	7	9		135	348			
	15-30	93	6		6	2	65	1	3		140	316			
	30-45	133	6		10	1	50	9	6		105	320			
	45-60	110	10		6		62	6	16	6	120	336			
Sub Total		428	26	57	26	3	217	23	34	6	500	1320			
ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		TOTOWN				Total
Hours		Car			Light		Medium		Heavy		Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
10	00-15	94	9	98	5	2	65	17	4	2	100	396			
	15-30	120	12	80	7		60	11	8	4	106	407			
	30-45	100	8	79	2	1	70	9	6	4	105	384			
	45-60	89	10	80	6		60	7	14	4	130	400			
Sub Total		403	39	337	20	3	255	44	32	14	440	1587			
11	00-15	140	8	95	7		52	2	5	4	170	483			
	15-30	120	12	95	5		40	8	13	4	105	402			
	30-45	95	8	95	4		68	12	5	12	120	419			
	45-60	95	2	85	10	3	70	8	8	3	155	439			
Sub Total		450	30	370	26	3	230	30	31	23	550	1743			
12	00-15	100	5	3	53		58	8	12	9	105	353			
	15-30	85	4	7	62	1	65	4	8	5	140	381			
	30-45	100		7	40	1	84	3	5	6	115	361			
	45-60	90	2	5	50	1	67	4	8	8	110	345			
Sub Total		375	11	22	205	3	274	19	33	28	470	1440			
13	00-15	115	13	62	2	40	12	6	6	5	160	421			
	15-30	90	18	70	2	53	6	6	6	8	155	414			
	30-45	110	10	60		55	5	6	6	3	110	385			
	45-60	82	5	50		60	5	5	5	3	105	320			
Sub Total		397	46	242	4	208	28	23	23	19	530	1520			

表 3.46 スクリーンライン調査結果(SL5_to West_14:00-21:00)

ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		TOTOWN					
Hours		Car			Light		Medium		Heavy		Articulated		Articulated		Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up		Light Truck		Semi-Trailer		Motor Cycle	Bicycle		
																
14	00-15	137		94	5			95	17		1		6	4		359
	15-30	125		35				25	16		3		1	1		206
	30-45	120	1	52				49	15		8		5	2		252
	45-60	167	2	55				50	14		2		3	2		295
Sub Total		549	3	236	5	0		219	62		14		15	9		1112
15	00-15	126		59	3			44	10		2		7	2		253
	15-30	154	2	66	2			43	10		1		9	2		289
	30-45	132	1	90	8			65	26		8		5	6		341
	45-60	95		13	3			10					1	1		123
Sub Total		507	3	228	16	0		162	46		11		22	11		1006
16	00-15	90		39	9			15	18		6		6	4		187
	15-30	120		45	1			36	30		1		4	6		243
	30-45	105		39	3			24	7		4		4	4		190
	45-60	125		70	2			34	7		3		4	6		251
Sub Total		440	0	193	15	0		109	62		14		18	20		871
17	00-15	85		51	6			37	13		6		2	16		216
	15-30	108	1	45	2			25	6		5		3	4		199
	30-45	135		73	5	3		41	15		5		2	5		284
	45-60	135		62	5	1		34	4		1			23		285
Sub Total		463	1	231	18	4		137	38		17		7	48		964
ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		TOTOWN					
Hours		Car			Light		Medium		Heavy		Articulated		Articulated		Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up		Light Truck		Semi-Trailer		Motor Cycle	Bicycle		
																
18	00-15	127		60	6			25	15		4		5	5		247
	15-30	92		28				5	3					2		130
	30-45	80		52				33	8		5		1	2		181
	45-60	68		43				19	1				4	2		137
Sub Total		367	0	183	6	0		82	27		9		10	11		695
19	00-15	80		63	6			27	3		2			1		182
	15-30	75		30	1			23	7		1		1			138
	30-45	72		60	1			39	4		2		1	4		183
	45-60	82	1	41				25	4		3			1		157
Sub Total		309	1	194	8	0		114	18		8		2	6		660
20	00-15	72		23				35	2		1					133
	15-30	46		1	1			7	1				1			57
	30-45	55		20				15	3					1		94
	45-60	77		14	1			26						5		123
Sub Total		250	0	58	2	0		83	6		1		1	6		407
21	00-15	42		15				13	2				1			73
	15-30	41		6	1			16	1				1			66
	30-45	38		10				26	1					1		76
	45-60	46		6				25	1							78
Sub Total		167	0	37	1	0		80	5		0		2	1		293

表 3.47 スクリーンライン調査結果(SL5_to West,22:00-05:00)

ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		TOTOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
22	00-15	7		2			3					12			
	15-30	8	2	1	2		3					16			
	30-45	6					8				2	16			
	45-60	14		1			4				1	20			
Sub Total		35	2	4	2	0	18	0	0	0	3	64			
23	00-15	20		2			4	1				27			
	15-30	6		5			6					17			
	30-45	14		3			8					25			
	45-60	7					7					14			
Sub Total		47	0	10	0	0	25	1	0	0	0	83			
0	00-15	7		2			6					15			
	15-30	19					3					22			
	30-45	8					2				1	11			
	45-60	13		2			6	1				22			
Sub Total		47	0	4	0	0	17	1	0	0	1	70			
1	00-15	6	1	1			1				2	11			
	15-30	7		2			5					14			
	30-45	2		1			2	1				6			
	45-60	5		2				1				8			
Sub Total		20	1	6	0	0	8	2	0	0	2	39			
ROAD NAME:		INDEPENDENCE AVENUE			STATION:		SL5		DIRECTION:		TOTOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle				
															
2	00-15	3					1		1			5			
	15-30	2		2								4			
	30-45	4		5								9			
	45-60	3		1								4			
Sub Total		12	0	8	0	0	1	0	1	0	0	22			
3	00-15	5		2			4					11			
	15-30	7		3			1	1				12			
	30-45	4		2			3					9			
	45-60	10		3			1				1	15			
Sub Total		26	0	10	0	0	9	1	0	0	1	47			
4	00-15	7		8	1		3	2				21			
	15-30	17					5				6	28			
	30-45	20		3			3	1			1	28			
	45-60	18		6			3	2			5	34			
Sub Total		62	0	17	1	0	14	5	0	0	12	111			
5	00-15	21		12			7				4	44			
	15-30	20		17	3		8	2			3	53			
	30-45	19		20	7		9	2	4		4	65			
	45-60	46		30	17		11	4			11	119			
Sub Total		106	0	79	27	0	35	8	4	0	22	281			
Total		6414	272	3394	506	237	2756	505	325	188	3954	18551			

表 3.48 スクリーンライン調査結果(SL6_to East_06:00-13:00)

ROAD NAME:		INNER RING ROAD			STATION:		SL -6		DIRECTION: FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
6	00-15	3	2	6	3		3				6	23
	15-30	31	1	11	13		9	1			13	79
	30-45	21	3	21	10		4	9	4		20	92
	45-60	14	2	21	3		5	1	1		35	82
Sub Total		69	8	59	29	0	21	11	5	0	74	276
7	00-15	29	3	25	3	1	6	8		1	11	87
	15-30	17	2	19	1		5	2	3	1	19	69
	30-45	25	3	23		1	7	16	6	3	29	113
	45-60	17	4	15			3	9	8	2	21	79
Sub Total		88	12	82	4	2	21	35	17	7	80	348
8	00-15	15	5	10			4	3	2		23	62
	15-30	22	5	28	1		7	7	4	1	25	100
	30-45	20	7	27			7	5	7	1	32	108
	45-60	20	10	19			16	2	5		20	92
Sub Total		77	27	84	1	0	34	17	18	2	100	360
9	00-15	21	2	11	2		6	2	7	2	28	81
	15-30	31	7	11	1		4	10	9	1	24	98
	30-45	20	8	11			10	7	7	1	19	83
	45-60	26	5	15			17	5	10	1	21	100
Sub Total		98	22	48	3	0	37	24	33	5	92	362
ROAD NAME:		INNER RING ROAD			STATION:		SL -6		DIRECTION: FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
10	00-15	30	3	15	1		14	7	6		24	100
	15-30	32	1	13	2		9	6	5		20	88
	30-45	27	1	9	2		10	10	1	2	24	86
	45-60	27	9	13			12	9	7	2	27	106
Sub Total		116	14	50	5	0	45	32	19	4	95	380
11	00-15	28	4	7			9	5	3	1	27	84
	15-30	23	10	8			10	5	4	1	18	79
	30-45	35	4	9			10	3	10	2	28	101
	45-60	31	11	9			13	7	7	1	21	100
Sub Total		117	29	33	0	0	42	20	24	5	94	364
12	00-15	35	4	11	1		19	10	9		22	111
	15-30	45	6	16			15	16	4	1	19	122
	30-45	32	9	15			9	11	5	3	13	97
	45-60	40	10	18	1		20	9	5	1	17	121
Sub Total		152	29	60	2	0	63	46	23	5	71	451
13	00-15	42	3	10			16	8	8		11	98
	15-30	40	5	11			10	6	4		27	103
	30-45	33	8	9	1		13	10	1	1	12	88
	45-60	26	7	10			15	6	4		11	79
Sub Total		141	23	40	1	0	54	30	17	1	61	368

表 3.49 スクリーンライン調査結果(SL6_to East_14:00-21:00)

ROAD NAME:		INNER RING ROAD			STATION:		SL -6		DIRECTION: FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
14	00-15	55		12			13	5	3	1	5	94
	15-30	43		10			12	3	13		3	84
	30-45	47		8			9	11	3	1	6	85
	45-60	80		10			12	9	4			115
Sub Total		225	0	40	0	0	46	28	23	2	14	378
15	00-15	70		15			12	6	3	1	15	122
	15-30	66		13			6	3	5		18	111
	30-45	71		15			9	14	8		3	120
	45-60	75		8	2		7	9	2		6	109
Sub Total		282	0	51	2	0	34	32	18	1	42	462
16	00-15	68	1	25			25	7	2	2	3	133
	15-30	60		23			10	10		1	4	108
	30-45	77		8	2		20	7	5	4	10	133
	45-60	82		58	1		47	7	5	3	20	223
Sub Total		287	1	114	3	0	102	31	12	10	37	597
17	00-15	80	5	50	1	2	44	25	5	6	22	240
	15-30	88		40	2		60	3	3	1	4	201
	30-45	144		43	1		73	5	3	3	25	297
	45-60	100		32			40	37	4		8	221
Sub Total		412	5	165	4	2	217	70	15	10	59	959
ROAD NAME:		INNER RING ROAD			STATION:		SL -6		DIRECTION: FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
18	00-15	227		169			80	90	75		2	643
	15-30	140		106	7		155	53	62			523
	30-45	101		37			23	13	12			186
	45-60	85		58			75	47		4	1	270
Sub Total		553	0	370	7	0	333	203	149	4	3	1622
19	00-15	63	2	43			22	22	3		2	157
	15-30	72		33	1		5	5	2		1	119
	30-45	73	3	35			13	2	3	1	2	132
	45-60	77		28	1		32	2			1	141
Sub Total		285	5	139	2	0	72	31	8	1	6	549
20	00-15	167		28	1		17	3			1	217
	15-30	66		13	3		2	1			1	88
	30-45	75		6	1		5	8		1		96
	45-60	63		56	2		42	27		2		192
Sub Total		371	0	103	7	0	66	39	0	3	2	591
21	00-15	62		4			31	5	1			103
	15-30	22					3					25
	30-45	57					11					68
	45-60	25		3			1			1		30
Sub Total		166	0	7	0	0	46	5	1	1	0	226
Total		3439	175	1445	70	4	1233	654	382	61	830	8293

表 3.50 スクリーンライン調査結果(SL6_to West_06:00-13:00)

ROAD NAME:		INNER RING ROAD			STATION:		SL-6	DIRECTION:	TO TOWN				
Hours		Car			Light		Medium	Heavy	Articulated				Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
6	00-15	7	2	8	3		7	2	2		12	43	
	15-30	40		27	5		15	10	1	7	15	120	
	30-45	58		20	10		13	9	1		40	151	
	45-60	91		26	5		20	5	5	1	30	183	
Sub Total		196	2	81	23	0	55	26	9	8	97	497	
7	00-15	88		24	2		22	4	5	2	29	176	
	15-30	101		39	2		30	2	5	1	21	201	
	30-45	72		28	2		18	3	2	1	30	156	
	45-60	88		24	3		18	1	3	4	35	176	
Sub Total		349	0	115	9	0	88	10	15	8	115	709	
8	00-15	76		25	3		17	5	4	3	42	175	
	15-30	73		25	6		21	4	7	1	54	191	
	30-45	74		16	4		12	4	5	1	37	153	
	45-60	64		22		1	16	6	6		19	134	
Sub Total		287	0	88	13	1	66	19	22	5	152	653	
9	00-15	46		26			18	3	1		31	125	
	15-30	60		19			14	7	5	2	42	149	
	30-45	66		11		1	12	1	5	1	33	130	
	45-60	62		15			10	8	3	3	44	145	
Sub Total		234	0	71	0	1	54	19	14	6	150	549	
ROAD NAME:		INNER RING ROAD			STATION:		SL-6	DIRECTION:	TO TOWN				
Hours		Car			Light		Medium	Heavy	Articulated				Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
10	00-15	64		23			9	4	5		35	140	
	15-30	56		16	1		9	3	7		27	119	
	30-45	55		14	1		13	5	8	1	23	120	
	45-60	52		10	1		7	4	9	1	52	136	
Sub Total		227	0	63	3	0	38	16	29	2	137	515	
11	00-15	45		14			6	11	9	3	35	123	
	15-30	23		7			6	5	7		23	71	
	30-45	40		6			10	2	4		30	92	
	45-60	45		14			8	4	7		29	107	
Sub Total		153	0	41	0	0	30	22	27	3	117	393	
12	00-15	50		5	1		12	4	6	4	24	106	
	15-30	68		12			12	5	8	2	13	120	
	30-45	35		8	1		7	6	22	1	27	107	
	45-60	35		5	1		10	3	6	2	21	83	
Sub Total		188	0	30	3	0	41	18	42	9	85	416	
13	00-15	50		13	1	1	12	2	8	4	13	104	
	15-30	37		9			7	5	10	3	19	90	
	30-45	28		12	1		9	7	8	1	15	81	
	45-60	66		12			8	3	4	1	8	102	
Sub Total		181	0	46	2	1	36	17	30	9	55	377	

表 3.51 スクリーンライン調査結果(SL6_to West_14:00-21:00)

ROAD NAME:		INNER RING ROAD			STATION:		SL-6	DIRECTION:		TO TOWN		Articulated	Total
Hours		Car			Light		Medium	Heavy	Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
14	00-15	50		12	1		10	7	7	1	6	94	
	15-30	39		12			10	9	15	3	10	98	
	30-45	48		11	1		10	8	6	1	7	92	
	45-60	43		9			7	8	6		5	78	
Sub Total		180	0	44	2	0	37	32	34	5	28	362	
15	00-15	46		6			12	5	9	1	6	85	
	15-30	50		10	3		11	10	10	1	3	98	
	30-45	50		7	1		5	6	8	2	7	86	
	45-60	45	1	11			8	6	9		5	85	
Sub Total		191	1	34	4	0	36	27	36	4	21	354	
16	00-15	52		10	1		5	3	11	2	4	88	
	15-30	45		10			5	6	10		8	84	
	30-45	49		6			4	9	10	1	5	84	
	45-60	45		9	2		5	9	5	1	8	84	
Sub Total		191	0	35	3	0	19	27	36	4	25	340	
17	00-15	55		5	2		9	5	7	1	10	94	
	15-30	43		10	2		9	8	13	1	10	96	
	30-45	45		17	7		22	10	12	6	8	127	
	45-60	50		15	3		9	7	5		12	101	
Sub Total		193	0	47	14	0	49	30	37	8	40	418	
ROAD NAME:		INNER RING ROAD			STATION:		SL-6	DIRECTION:		TO TOWN		Articulated	Total
Hours		Car			Light		Medium	Heavy	Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
18	00-15	57		15	8		9	8	5	1	8	111	
	15-30	37		10	10		5	4	7	2	12	87	
	30-45	55		13	11		10	8	7		7	111	
	45-60	37		13	5		11	7	3		7	83	
Sub Total		186	0	51	34	0	35	27	22	3	34	392	
19	00-15	45		9	6		12	10	5	3	5	95	
	15-30	45		6	1		5	6	4	1	4	72	
	30-45	44		4	6		5	7	3		6	75	
	45-60	30		4	1		5	9	1	1		51	
Sub Total		164	0	23	14	0	27	32	13	5	15	293	
20	00-15	38		6	2		10				2	58	
	15-30	38		2			5	3	1		1	50	
	30-45	34		1			2				2	39	
	45-60	21		2			3		2			28	
Sub Total		131	0	11	2	0	20	3	3	0	5	175	
21	00-15	24		1	1		3	2	1			32	
	15-30	25		2			3	4				34	
	30-45	20		2			4		1			27	
	45-60	17		1			1					19	
Sub Total		86	0	6	1	0	11	6	2	0	0	112	
Total		3137	3	786	127	3	642	331	371	79	1076	6555	

表 3.52 市内断面交通量調査結果(TC1_to North_06:00-13:00)

ROAD NAME:		LUMUMBA NORTH			STATION:		TCI		DIRECTION:		AWAY FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
6	00-15	8		7			2		10		9	36		
	15-30	16		26	1		6	5	16		23	93		
	30-45	25		37	3		10	2	12	1	18	108		
	45-60	51		38	1		18	4	16		52	178		
Sub Total		100	0	106	5	0	36	11	54	1	102	415		
7	00-15	51		33	1		24	3	14	2	70	198		
	15-30	64		58	2	1	27	5	22	5	60	244		
	30-45	67		53	5	4	20	10	29	5	90	283		
	45-60	65		57	6		37	4	23	6	85	283		
Sub Total		247	0	201	14	5	108	22	88	18	305	1008		
8	00-15	130	1	50	9		65	20	45	4	55	379		
	15-30	47		20			15	5		2	10	99		
	30-45	57		47			28	5	30			167		
	45-60	53		45			36	19	33	2	52	240		
Sub Total		287	1	162	9	0	144	49	108	8	117	885		
9	00-15	55		42	1	1	27	18	39	1	59	243		
	15-30	60		51	2		35	9	20	3	49	229		
	30-45	62		39	3		46	15	29	4	56	254		
	45-60	49		44	3		32	13	29		53	223		
Sub Total		226	0	176	9	1	140	55	117	8	217	949		
ROAD NAME:		LUMUMBA NORTH			STATION:		TCI		DIRECTION:		AWAY FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
10	00-15	73		41	2		49	13	28		45	251		
	15-30	56		44	3		45	15	30	2	44	239		
	30-45	69		40	2		42	14	18	2	28	215		
	45-60	75		39	4		61	13	28	5	37	260		
Sub Total		273	0	164	11	0	197	55	102	9	154	965		
11	00-15	85	1	38	4			46	30	5	37	244		
	15-30	72		28				42	36	2	51	231		
	30-45	80		34	4			51	33	3	48	253		
	45-60	65		35	1			46	36	4	43	230		
Sub Total		302	1	133	9	0	0	185	135	14	179	958		
12	00-15	75		37	2	1	64	20	28	3	18	248		
	15-30	65		31	3		51	18	39	4	45	256		
	30-45	75		24	3	2	55	17	29	3	31	239		
	45-60	65		39	2		45	13	22	3	40	229		
Sub Total		280	0	131	10	3	215	68	118	13	134	972		
13	00-15	75	1	41	4		40	13	51	3	49	277		
	15-30	69		28	2	2	44	15	30	2	40	230		
	30-45	65		36	2		56	12	25	3	43	242		
	45-60	73		32	2		46	12	27		39	231		
Sub Total		282	1	135	10	2	186	52	133	8	171	980		

表 3.53 市内断面交通量調査結果(TC1_to North_14:00-21:00)

ROAD NAME:		LUMUMBA NORTH			STATION:		TCI		DIRECTION:		AWAY FROM TOWN			
Hours		Car			Light	Medium	Heavy	Articulated		Articulated	Total			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle		Bicycle		
														
14	00-15	30	20	48	2	1	31	25	22	1	5	185		
	15-30	24	21	37	3		44	18	20	1	8	176		
	30-45	32	24	41	6		50	19	20	11	13	216		
	45-60	33	27	45	1		34	14	22	3	10	189		
Sub Total		119	92	171	12	1	159	76	84	16	36	766		
15	00-15	52	3	55	12		37	30	31	8	20	248		
	15-30	58	2	37	5		20	12	30	2	22	188		
	30-45	70	10	25	2		33	13	54	3	33	243		
	45-60	62	20	28	11		40	20	35	2	15	233		
Sub Total		240	35	145	30	0	130	75	150	15	90	910		
16	00-15	50	27	43	5		82	25	30	2	9	273		
	15-30	38	38	40	6		70	31	18	3	35	277		
	30-45	52	55	58	4		63	24	23	5	33	317		
	45-60	65	60	60	5		80	15	6		35	326		
Sub Total		205	180	201	20	0	295	95	75	10	112	1193		
17	00-15	102	28	73	42		58	32	42	28	77	482		
	15-30	117	72	77	40		70	38	60	32	90	596		
	30-45	105	47	54	37		53	23	47	9	73	448		
	45-60	130	48	73	64	1	76	26	54	19	48	539		
Sub Total		454	195	277	183	1	257	119	203	88	288	2065		
ROAD NAME:		LUMUMBA NORTH			STATION:		TCI		DIRECTION:		AWAY FROM TOWN			
Hours		Car			Light	Medium	Heavy	Articulated		Articulated	Total			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle		Bicycle		
														
18	00-15	45	50	90	7		67	16	8	3	59	345		
	15-30	80	75	120	8		77	25	14	1	50	450		
	30-45	54	50	990	11		60	12	8	1	30	1216		
	45-60	63	45	82	9		68	13	8	1	21	310		
Sub Total		242	220	1282	35	0	272	66	38	6	160	2321		
19	00-15	83	8	42	22	1	38	27	26	6	32	285		
	15-30	62	7	48	47		47	26	40	3	27	307		
	30-45	92	3	38	18		23	13	19	1	15	222		
	45-60	34	11	27	31		52	8	17	2	8	190		
Sub Total		271	29	155	118	1	160	74	102	12	82	1004		
20	00-15	18	15	35	3		14	10	6		5	106		
	15-30	35	25	27	5		22	8	5		9	138		
	30-45	32	20	21	2		7	4	1		4	91		
	45-60	30	17	29	2		11		3	1	9	102		
Sub Total		115	77	112	12	0	54	22	15	1	27	435		
21	00-15	33		8	2		7	4	4		4	62		
	15-30	37	2	13	4		19	6	5		1	87		
	30-45	45		11			4	1	3			64		
	45-60	13	1	3	1		1		1		2	22		
Sub Total		128	3	35	7	0	31	11	13	0	7	235		
Total		3771	834	3586	494	14	2384	1035	1535	227	2481	16061		

表 3.54 市内断面交通量調査結果(TC1_to South_06:00-13:00)

ROAD NAME:		LUMUMBA NORTH			STATION:		TCI		DIRECTION:		TOTOWN				
Hours		Car			Light		Medium	Heavy	Articulated						
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	Total			
															
6	00-15	17	23	1		2	40	5	11	1	20	120			
	15-30	45	46	5			44	2	22	2	20	186			
	30-45	72	58	6			45	18	21		45	265			
	45-60	68	47	1			40	40	25	6	20	247			
Sub Total		202	174	13	0	2	169	65	79	9	105	818			
7	00-15	100	1	75	6	2	45	11	40	3	40	323			
	15-30	96		82	2		30	37	38		45	328			
	30-45	121		90	1		37	41	6		40	336			
	45-60	75		85			38	33	30	6	20	287			
Sub Total		392	1	332	9	2	150	122	112	9	145	1274			
8	00-15	87		83	2	1	40	18	75		35	341			
	15-30	95	1	61	2	1	24	34	26	4	21	269			
	30-45	67	1	55	2		35	38	29	3	35	265			
	45-60	66		96	1		45	16	36	5	40	304			
Sub Total		314	2	295	7	2	144	106	166	12	131	1179			
9	00-15	80		58	1	1	95	22	25	1	13	296			
	15-30	75	1	58	1		66	20	30	1	15	267			
	30-45	82		60			85	10	25	2	27	291			
	45-60	90		81			60	15	34	2	7	289			
Sub Total		327	1	257	2	1	306	67	114	6	62	1143			
ROAD NAME:		LUMUMBA NORTH			STATION:		TCI		DIRECTION:		TOTOWN				
Hours		Car			Light		Medium	Heavy	Articulated						
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	Total			
															
10	00-15	22		80			55	16	27	1	20	221			
	15-30	81		45	3		50	12	35	5	60	291			
	30-45	78		51			50	20	31	1	35	266			
	45-60	68		44			45	110	19	4	19	309			
Sub Total		249	0	220	3	0	200	158	112	11	134	1087			
11	00-15	63		30			53	11	26	4	22	209			
	15-30	62		56			43	7	21	1	19	209			
	30-45	63		53			38	17	30	2	18	221			
	45-60	77		76	2		34	10	20	1	27	247			
Sub Total		265	0	215	2	0	168	45	97	8	86	886			
12	00-15	63		27		1	58	12	30	2	18	211			
	15-30	63		45			41	25	34	6	33	247			
	30-45	72		56	2		60	23	42	4	35	294			
	45-60	58		35	7		50	4	28		18	200			
Sub Total		256	0	163	9	1	209	64	134	12	104	952			
13	00-15	65		50		2	60	19	20	2	32	250			
	15-30	70		40		2	60	14	17	3	21	227			
	30-45	107		73	1		50	6	21	5	16	279			
	45-60	83		62			50	20	21	2	30	288			
Sub Total		325	0	225	1	4	220	59	79	12	99	1024			

表 3.55 市内断面交通量調査結果(TC1 to South_14:00-21:00)

ROAD NAME:		LUMUMBA NORTH			STATION:		TCI		DIRECTION:		TOTOWN			Total
Hours		Car			Light		Medium	Heavy	Articulated		Articulated			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
14	00-15	48		15		1	28	12	14	4	2	124		
	15-30	85		36	2	1	52	21	19	4	12	232		
	30-45	93		32	2		61	18	12	1	5	224		
	45-60	85		28	3	1	41	13	15	5	6	197		
Sub Total		311	0	111	7	3	182	64	60	14	25	777		
15	00-15	59		32	4		37	15	16	4	11	178		
	15-30	61		40			64	27	20	3	12	227		
	30-45	64		38	2	1	40	22	38	4	6	213		
	45-60	73		40	1	1	66	18	31	5	7	242		
Sub Total		257	0	150	7	2	207	82	103	16	36	860		
16	00-15	100		29	1	1	55	18	22	4	5	235		
	15-30	64	1	36	3		59	19	13	3	10	208		
	30-45	103	3	31	7		28	25	19	4	8	228		
	45-60	76	1	33	4		43	23	14	4	14	212		
Sub Total		343	5	129	15	1	183	85	68	15	37	881		
17	00-15	61	6	37	3		35	9	33		38	222		
	15-30	55		50	3	1	34	7	17	3	30	200		
	30-45	45		43	8	1	31	5	14	1	28	176		
	45-60	50		52	2		27	11	13		14	169		
Sub Total		211	6	182	16	2	127	32	77	4	110	767		
ROAD NAME:		LUMUMBA NORTH			STATION:		TCI		DIRECTION:		TOTOWN			Total
Hours		Car			Light		Medium	Heavy	Articulated		Articulated			
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
18	00-15	63		33	7	1	28	16	14	2	12	176		
	15-30	57		47	4	1	22	5	7	2	9	154		
	30-45	68		51	4		20	11	13	1	7	175		
	45-60	67		43	5		40	10	9		5	179		
Sub Total		255	0	174	20	2	110	42	43	5	33	684		
19	00-15	53		51	5		19	11	9	2	9	159		
	15-30	45		40	7	1	19	11	12	1	7	143		
	30-45	44		43	5		18	16	11		6	143		
	45-60	48		17	3		16	10	11		1	108		
Sub Total		190	0	151	20	1	72	48	43	3	23	551		
20	00-15	60		23	4		35	5	14			141		
	15-30	35		14	1	2	17	2	7			78		
	30-45	56		12	3		22	4	8	1	2	108		
	45-60	48		8	3		23		2			84		
Sub Total		199	0	57	11	2	97	11	31	1	2	411		
21	00-15	26		16	1		17	2	7	3	1	73		
	15-30	31		22	4		16	6	7	3		89		
	30-45	32		20	1		22	2	2			79		
	45-60	25		17	2	1	17	6	4			72		
Sub Total		114	0	75	8	1	72	16	20	6	1	313		
Total		4210	189	2749	137	26	2616	1066	1338	143	1133	13607		

表 3.56 市内断面交通量調査結果(TC2_to North_06:00-13:00)

ROAD NAME:		GREAT NORTHRoad			STATION:		TC 2		DIRECTION: FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
6	00-15	22		28	4		19	6	4	1	1	85
	15-30	18		30	6		30	1				85
	30-45	51		47	9	3	28	9	2		2	151
	45-60	55		41	18	1	32	2	9	2	3	163
Sub Total		146	0	146	37	4	109	18	15	3	6	484
7	00-15	87		35	16	1	53	4	7	1	17	221
	15-30	221		61	25	2	98	5	1		27	440
	30-45	122		16	19		60	1	2		33	253
	45-60	115		20	8	2	52	6	3		31	237
Sub Total		545	0	132	68	5	263	16	13	1	108	1151
8	00-15	75		35	12	1	40	3		6	30	202
	15-30	75		37	18	2	69	4	5	5	15	230
	30-45	78		45	285		40	6	1	2	25	482
	45-60	62		28	15	4	31	7	1		30	178
Sub Total		290	0	145	330	7	180	20	7	13	100	1092
9	00-15	58		31	29	3	28	13	5	3	22	192
	15-30	84		30	15	1	40	8	2	3	10	193
	30-45	133		40	20	2	81	17	3	2	25	323
	45-60	98		25	13	3	62	7	4		10	222
Sub Total		373	0	126	77	9	211	45	14	8	67	930
ROAD NAME:		GREAT NORTHRoad			STATION:		TC 2		DIRECTION: FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
10	00-15	78		41	10	3	46	10	4	5	19	216
	15-30	145		18	5	1	74	3	2	3	20	271
	30-45	122		20	20		68	5	5	3	20	263
	45-60	125		33	25	3	60	7	2	15	10	280
Sub Total		470	0	112	60	7	248	25	13	26	69	1030
11	00-15	132	1	16	10	1	79	17	2	2	20	280
	15-30	168		35	6	2	88	16	8	1	15	337
	30-45	130		20	10		64	14	4	3	45	290
	45-60	140		42	15	2	70	23	5	8	30	335
Sub Total		570	1	113	41	5	299	70	19	14	110	1242
12	00-15	133		40	10	3	50	10	5	2	65	318
	15-30	122		35	10	1	62	25	5	5	40	305
	30-45	103		52	8	2	64	13	2	5	32	281
	45-60	88		93	15		72	17	1	5	20	309
Sub Total		444	0	220	43	6	248	65	13	17	157	1213
13	00-15	95	1	29	7	2	64	14		4	25	241
	15-30	62		40	13		58	13	4	3	25	218
	30-45	102		30	15	2	74	10	7	4	20	284
	45-60	80		40	8	4	25	11	15	3	15	201
Sub Total		339	1	139	43	8	221	48	26	14	85	924

表 3.57 市内断面交通量調査結果(TC2_to North_14:00-21:00)

ROAD NAME:		GREAT NORTHROAD			STATION:		TC 2		DIRECTION: FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
14	00-15	169		43	8	1	63	8	10	3	37	342
	15-30	159		32	10	3	70	13	12	5	42	346
	30-45	164		49	7		48	19		6	55	346
	45-60	119		45	6	3	63	22		4	38	298
Sub Total		611	0	169	31	7	242	62	22	18	170	1332
15	00-15	162	1	40	6	2	69	18	16	3	34	351
	15-30	127		56	8		73	12	9	7	56	348
	30-45	158		39	11	1	48	19	6	7	37	322
	45-60	155	1	36	14	2	79	13	11	4	43	358
Sub Total		600	2	171	39	5	267	62	42	21	170	1379
16	00-15	192		59	15	1	65	14	7	8	57	418
	15-30	162		38	14	2	89	17	3	6	77	408
	30-45	175		51	16	2	64	18	7	11	108	452
	45-60	210		52	16	2	88	28	7	8	73	480
Sub Total		739	0	198	61	7	304	75	24	33	315	1756
17	00-15	205		60	18	1		24	8	7		323
	15-30	193		75	21	1		21	10	8		329
	30-45	212		120	31	1		7	15	2		388
	45-60	22		140	26	1		12	7	5		213
Sub Total		632	0	395	96	4	0	64	40	22	0	1253
ROAD NAME:		GREAT NORTHROAD			STATION:		TC 2		DIRECTION: FROM TOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	
												
18	00-15	141		130	23	1		9	12	2		318
	15-30	129			14			13				156
	30-45	151			37	1		10	15	2		216
	45-60	180			20			13	3	4		220
Sub Total		601	0	130	94	2	0	45	30	8	0	910
19	00-15	187	1	57	22	1	31	10	8	5	43	385
	15-30	93		45	20	1	60	9	11	4	81	324
	30-45	119		50	21		38	4	1	3	21	255
	45-60	107		55	12		45	8	7	1	45	280
Sub Total		506	1	207	75	2	172	31	27	13	190	1224
20	00-15	99		37	13	1	37	89	3	3	2	284
	15-30	110		50	11	2	51	8	3	2	15	252
	30-45	84		55	6	1	25	4		3	2	180
	45-60	63		30	5		20	1	4	1	11	135
Sub Total		356	0	172	35	4	133	102	10	9	30	851
21	00-15	64		11	4	1	185	2	1	3		271
	15-30	58		15	3	1	13	2			2	94
	30-45	58		10	4		14	2				88
	45-60	41		4	1		5		1			52
Sub Total		221	0	40	12	2	217	6	2	3	2	505
Total		7443	5	2615	1142	84	3114	754	317	223	1579	17276

表 3.58 市内断面交通量調査結果(TC2 to South_06:00-13:00)

ROAD NAME:		GREAT NORTHRoad			STATION:		TC2		DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
6	00-15	26		28	5		3	2			6	71		
	15-30	56		66	7	1	14	3	1		13	161		
	30-45	83		90	15		29	3	11		19	250		
	45-60	90		78	15	2	14	10		4	25	236		
Sub Total		255	0	261	42	3	60	18	12	4	63	718		
7	00-15	87		94	17	1	30	9			28	266		
	15-30	90		63	28		28	1			33	243		
	30-45	100		64	20	1	44	1	2	2	43	277		
	45-60	90		39	11		20	12	1	1	29	203		
Sub Total		367	0	260	76	2	122	23	3	3	133	989		
8	00-15	78		27	11	1	27	4	2	2	26	178		
	15-30	70		22	9	2	40	12	4	3	28	190		
	30-45	90		32	22	3	28	28	2	5	25	235		
	45-60	73		39	9		42	8	1		7	179		
Sub Total		311	0	120	51	6	137	52	9	10	86	782		
9	00-15	76		37	20	1	36	5	1	3	27	206		
	15-30	64		26	10	2	40	15	5	5	22	189		
	30-45	59		25	9	2	35	17		5	8	160		
	45-60	76		31	12	1	40	5	1	2	18	188		
Sub Total		275	0	119	51	6	151	42	7	15	75	741		
ROAD NAME:		GREAT NORTHRoad			STATION:		TC2		DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi- Trailer	Motor Cycle	Bicycle			
														
10	00-15	67		32	9	1	45	15			23	192		
	15-30	68		27	17	1	31	7			6	157		
	30-45	57		28	11		33	8			5	142		
	45-60	39		18	10		32	5		1	2	107		
Sub Total		231	0	105	47	2	141	35	0	1	36	598		
11	00-15	58		26	12		27	6	1	2	9	141		
	15-30	89		29	10	1	40	10	3	3	10	195		
	30-45	88		44	8	1	45	10	4	4	10	214		
	45-60	86		51	12	1	25	5	3	3	19	205		
Sub Total		321	0	150	42	3	137	31	11	12	48	755		
12	00-15	89		35	6	1	41	11	2	3	9	197		
	15-30	90		20	5	2	40	5	4	4	12	182		
	30-45	82	1	37	6	1	40	16	4	4	22	213		
	45-60	75		30	12	3	60	12	4	4	17	217		
Sub Total		336	1	122	29	7	181	44	14	15	60	809		
13	00-15	75		34	7	1	45	9	3	6	8	188		
	15-30	75		32	16		38	10	4	4	12	189		
	30-45	91		27	8		52	9	5	4	10	206		
	45-60	75		37	6		45	11	5	3	4	186		
Sub Total		316	0	130	37	1	178	39	17	17	34	769		

表 3.59 市内断面交通量調査結果(TC2 to South_14:00-21:00)

ROAD NAME:		GREAT NORTHRoad				STATION:	TC2	DIRECTION:	TOTOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
14	00-15	85	17	34	6	3	42	20	11		21	239	
	15-30	117		27	10	1	39	19	10	5	2	230	
	30-45	122		43	16	2	55	18	9	3	8	276	
	45-60	117	8	45	10	16	55	25	9	2	8	295	
Sub Total		441	25	149	42	22	191	82	39	10	39	1040	
15	00-15	103	7	30	11	2	52	17	10	2	7	241	
	15-30	98	2	37	8	1	74	14	6	4	9	251	
	30-45	95		41	12	2	72	16	9	3	3	253	
	45-60	102	35	38	16	1	44	4	5	2	12	259	
Sub Total		396	44	146	47	6	242	51	30	11	31	1004	
16	00-15	103	4	41	9	1	64	14	7	1	13	257	
	15-30	110	7	47	17	2	55	13	8	1	14	274	
	30-45	102	2	38	13	2	66	15	4		24	266	
	45-60	96	5	41	13	3	45	17	1	3	44	268	
Sub Total		411	18	167	52	8	230	59	20	5	95	1065	
17	00-15	110	47	47	12	2	33	4	4	1	18	278	
	15-30	77	43	43	14	4	45	8	5	2	37	278	
	30-45	80	49	49	13	1	29	2	6	3	35	267	
	45-60	68	37	41	18	5	41	8	6	3	11	238	
Sub Total		335	176	180	57	12	148	22	21	9	101	1061	
ROAD NAME:		GREAT NORTHRoad				STATION:	TC2	DIRECTION:	TOTOWN				
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
18	00-15	80	3	61	25		40	5	2		12	228	
	15-30	76	7	49	18	2	40	4	4		8	208	
	30-45	61	3	30	18	1	35	3	7	3	6	167	
	45-60	72	3	38	16	1	19	2	1		1	153	
Sub Total		289	16	178	77	4	134	14	14	3	27	756	
19	00-15	65	2	38	13	1	32	4	3	1		159	
	15-30	75	1	35	24	2	21	7	4	1	3	173	
	30-45	50	4	15	12		25	3	3		2	114	
	45-60	55	2	24	12	3	19	4	1		6	126	
Sub Total		245	9	112	61	6	97	18	11	2	11	572	
20	00-15	59		12	10	1	35	3	5		7	132	
	15-30	39		14	9	5	21	1	2	3		94	
	30-45	35		16	2	2	39	3	1			96	
	45-60	37		12	2		17		2	2	2	74	
Sub Total		170	0	54	23	8	112	7	10	5	9	398	
21	00-15	46	3	3	3	4	25	4	3		2	93	
	15-30	42	1	2	1	1	17	3	3			70	
	30-45	43	6	4			27	2	2		2	86	
	45-60	30	2				22	2				56	
Sub Total		161	12	9	4	5	91	11	8	0	4	305	
Total		4860	301	2262	738	101	2352	548	226	122	852	12362	

表 3.60 市内断面交通量調査結果(TC3_to North_06:00-13:00)

ROAD NAME:		LUMUMBA SOUTH			STATION:		TC-3		DIRECTION: FROM KAFUE ROAD			Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Bicycle	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer			
												
6	00-15	55	8	45	3		60	40	80	4	105	400
	15-30	18		5	2		105	50	90	2	105	377
	30-45	50	3	18	2		80	20	55		108	334
	45-60	105	2	60	35		65	55	50		90	462
Sub Total		228	13	128	42	0	310	165	275	6	406	1573
7	00-15	87	10	18	8		40	3	23	2	257	448
	15-30	105	2	27	9		32	3	23	2	277	480
	30-45	115	34	75	26		22	2	10	2	265	551
	45-60	45	3	5	5		35	4	13		240	350
Sub Total		352	49	125	48	0	129	12	69	6	1039	1829
8	00-15	110	6	37	16		18	11	17	7	120	342
	15-30	80		46	16		27	15	20	7	90	301
	30-45	108	20	34	15		29	36	37	9	95	383
	45-60	33		12	4		35	46	21	11	80	242
Sub Total		331	26	129	51	0	109	108	95	34	385	1268
9	00-15	95	5	27	8		48	47	27	11	272	540
	15-30	50		30	7		107	83	68	19	230	594
	30-45	107	3	27	6		11	17	7	14	110	302
	45-60	40		15			52	53	95	4	95	354
Sub Total		292	8	99	21	0	218	200	197	48	707	1790
ROAD NAME:		LUMUMBA SOUTH			STATION:		TC-3		DIRECTION: FROM KAFUE ROAD			Total
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Bicycle	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer			
												
10	00-15	50		30	4		93	103	28	1	195	504
	15-30	60		36	9		74	29	7		63	278
	30-45	28		19	1		72	13	40		95	268
	45-60	51		23	6		105	90	75		95	445
Sub Total		189	0	108	20	0	344	235	150	1	448	1495
11	00-15	28	33	29	5		97	90	90	13	53	438
	15-30	25	15	20	3		68	7	54	1	110	303
	30-45	38	10	32	8		49	19	8	1	65	230
	45-60	40	2	28	6		15	13	23		58	185
Sub Total		131	60	109	22	0	229	129	175	15	286	1156
12	00-15	35	4	20	4		20	15	20		228	346
	15-30	35		25	10		7	5	12		140	234
	30-45	90		85	27		25	22	30		35	314
	45-60	35		36	5		23	16	28		44	187
Sub Total		195	4	166	46	0	75	58	90	0	447	1081
13	00-15	40		20	3		11	12	10		87	183
	15-30	45					20	12	23		35	135
	30-45	11		3			27	12	25		42	120
	45-60	60		65			25	15	30		55	250
Sub Total		156	0	88	3	0	83	51	88	0	219	688

表 3.61 市内断面交通量調査結果(TC3_to North_14:00-21:00)

ROAD NAME:		LUMUMBA SOUTH			STATION:		TC-3		DIRECTION: FROM KAFUE ROAD			
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle	
												
14	00-15	28		10	6		20	12	10	2	18	106
	15-30	72		25	3		45	27	10		64	246
	30-45	80		30	6		29	28	11		63	247
	45-60	68		30	2		40	27	12		62	241
Sub Total		248	0	95	17	0	134	94	43	2	207	840
15	00-15	70		16	5		39	18	25		54	227
	15-30	66		13	7		41	18	14		70	229
	30-45	60		23	3		38	28	10		50	212
	45-60	62		10	6		31	36	15		50	210
Sub Total		258	0	62	21	0	149	100	64	0	224	878
16	00-15	78		19	11		37	28	14		42	229
	15-30	66		14	8		38	23	10		60	217
	30-45	63		8	5		31	22	18		60	207
	45-60	62		7	8		20	28	16		55	196
Sub Total		269	0	48	32	0	124	101	58	0	217	849
17	00-15	61		7	9		35	20	11	6	80	229
	15-30	55		22	9		24	11	11	3	50	185
	30-45	48		18	4		28	14	10	6	80	208
	45-60	47		13	4		21	14	10	1	21	131
Sub Total		211	0	60	26	0	108	59	42	16	231	753
ROAD NAME:		LUMUMBA SOUTH			STATION:		TC-3		DIRECTION: FROM KAFUE ROAD			
Hours		Car			Light		Medium	Heavy	Articulated	Motor Cycle	Articulated	Total
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer		Bicycle	
												
18	00-15	49		23	13		20	20	7	1	63	196
	15-30	40		16	10		13	7	14	1	75	176
	30-45	31		28	8		20	6	6		30	129
	45-60	28		22	8		10	15	10	1	45	139
Sub Total		148	0	89	39	0	63	48	37	3	213	640
19	00-15	32		14	5		10	6	6		20	93
	15-30	39		30	19		11	5	4		15	123
	30-45	45	1	16	9		2	10	8		6	97
	45-60	38		16	5		10	1	10		5	85
Sub Total		154	1	76	38	0	33	22	28	0	46	398
20	00-15	31		13	3		12	14	10		6	89
	15-30	39		9	3		13	3	4	1		72
	30-45	29		7	2		6	7	4		1	56
	45-60	29		8	1		6	2	6		1	53
Sub Total		128	0	37	9	0	37	26	24	1	8	270
21	00-15	28		8			3	6	5	1	1	52
	15-30	26		4	1		6	1	2		1	41
	30-45	16		9			2				1	28
	45-60	23		4			2					29
Sub Total		93	0	25	1	0	13	7	7	1	3	150
Total		3383	161	1444	436	0	2158	1415	1442	133	5086	15658

表 3.62 市内断面交通量調査結果(TC3 to South_06:00-13:00)

ROAD NAME:		LUMUMBA ROAD SOUTH			STATION:		TC-3		DIRECTION:		TOKAFUE ROADS				
Hours		Car			Light		Medium		Heavy		Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	Total			
															
6	00-15	17		27	1		10					40	95		
	15-30	10		38	2		1	1	19	1	83	155			
	30-45	35		58							22	115			
	45-60	31		38								69			
Sub Total		93	0	161	3	0	11	1	19	1	145	434			
7	00-15	46		60	4		10	13	19	2	10	164			
	15-30	53		36	5	1	3	8	25	1	10	142			
	30-45	60		53	7	1	10	7	12	2	18	170			
	45-60	35		32	7		9	9	15		10	117			
Sub Total		194	0	181	23	2	32	37	71	5	48	593			
8	00-15	40		40	5		7	16	19	1	4	132			
	15-30	43		39	5		6	11	14	1	9	128			
	30-45	46		29	11		13	15	10		12	136			
	45-60	44		32	7		9	16	15	1	9	133			
Sub Total		173	0	140	28	0	35	58	58	3	34	529			
9	00-15	51		21	8		15	21	15	5	7	143			
	15-30	41		30	6		11	14	20		8	130			
	30-45	85		60	8	1	7	16	18	1	15	211			
	45-60	45		40	5		10	9	20		24	153			
Sub Total		222	0	151	27	1	43	60	73	6	54	637			
ROAD NAME:		LUMUMBA ROAD SOUTH			STATION:		TC-3		DIRECTION:		TOKAFUE ROADS				
Hours		Car			Light		Medium		Heavy		Articulated				
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle	Total			
															
10	00-15	53		22	5		9	9	20	1	4	123			
	15-30	39		23	4		8	11	18	1	8	112			
	30-45	37		28	4		12	24	20		4	129			
	45-60	30		25	4		9	11	20		3	102			
Sub Total		159	0	98	17	0	38	55	78	2	19	466			
11	00-15	43		18	4		16	24	15	2	13	135			
	15-30	56		32	3		7	15	21		6	140			
	30-45	77		21	4		16	6	30		5	159			
	45-60	57		29	5		17	10	15			133			
Sub Total		233	0	100	16	0	56	55	81	2	24	567			
12	00-15	48		22	4		11	5	11			101			
	15-30	57		16	2		16	21	21	1	7	141			
	30-45	57		24	9		13	12	17		1	133			
	45-60	45		23	4		15	18	13		2	120			
Sub Total		207	0	85	19	0	55	56	62	1	10	495			
13	00-15	34		15	4		11	7	11		3	85			
	15-30	31		17	2		9	8	15		1	83			
	30-45	40		7	1		3	8	12		2	73			
	45-60	46		27	6		22	9	18			128			
Sub Total		151	0	66	13	0	45	32	56	0	6	369			

表 3.63 市内断面交通量調查結果(TC3 to South_14:00-21:00)

ROAD NAME:		LUMUMBA ROAD SOUTH			STATION:		TC-3		DIRECTION:		TO KAFUE ROADS			
Hours		Car			Light		Medium	Heavy	Articulated			Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
14	00-15	91	2	13	8		29	31	17			4	195	
	15-30	44	1	10	2		15	15	12		1	1	101	
	30-45	53	1	20	9		15	14	22		4		138	
	45-60	75	2	24	7		27	21	14		4	3	177	
Sub Total		263	6	67	26	0	86	81	65		9	8	611	
15	00-15	65		20			16	17	13		2	20	153	
	15-30	54		23	7		17	31	23		2	20	177	
	30-45	70		31	7		22	27	23		4	49	233	
	45-60	57		14	5		22	21	20		1	67	207	
Sub Total		246	0	88	19	0	77	96	79		9	156	770	
16	00-15	61		35	6		36	17	12		2	90	259	
	15-30	70		15	4		28	21	20		2	57	215	
	30-45	74		21	10		18	19	14		5	62	221	
	45-60	75		22	6		19	12	14		4	68	220	
Sub Total		280	0	93	26	0	97	69	60		13	277	915	
17	00-15	111		20	7		42	20	13			78	291	
	15-30	82		25	6		42	6	10		3	120	294	
	30-45	81		34	7		25	12	10		3	90	282	
	45-60	74		18	12		25	14	15			60	218	
Sub Total		348	0	97	32	0	134	52	48		6	348	1065	
ROAD NAME:		LUMUMBA ROAD SOUTH			STATION:		TC-3		DIRECTION:		TO KAFUE ROADS			
Hours		Car			Light		Medium	Heavy	Articulated			Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
18	00-15	72		41	13		11	16	21		1	160	335	
	15-30	95		54	12		6	14	18			155	354	
	30-45	85		49	49		24	18	17			90	332	
	45-60	70		57	52		6	5	7		1	180	378	
Sub Total		322	0	201	126	0	47	53	63		2	585	1399	
19	00-15	56		53	11		20	5	5			65	215	
	15-30	52		33	11		30	10	15			60	211	
	30-45	42		35	13		11	10	3		2	44	160	
	45-60	38		31	6		15	2	3			17	110	
Sub Total		186	0	152	41	0	76	27	26		2	186	696	
20	00-15	51		23	10		9	5	10			8	116	
	15-30	30		13	7		10	1	3		1	1	68	
	30-45	35		18	4		15	3				3	78	
	45-60	28		13	5		8	1				5	60	
Sub Total		144	0	67	26	0	42	10	13		1	17	320	
21	00-15	31		15			10	4	3			2	65	
	15-30	41		21	2		6	2	2			1	75	
	30-45	21		2	1				1				25	
	45-60	12		9			3	2			2		28	
Sub Total		105	0	47	3	0	19	8	6		2	3	193	
Total		3326	6	1794	445	3	893	750	858		64	1920	10059	

表 3.64 市内断面交通量調査結果(TC4_to North_06:00-13:00)

ROAD NAME:		CAIRO ROAD			STATION:		TC4		DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
6	00-15	96	3	108	7	2	20	4	11	2	65	319		
	15-30	89	25	132	9	1	35	8	9		97	406		
	30-45	129	8	115	7	2	48	8	13	1	89	420		
	45-60	215	7	147	5		70	10	10	11	152	627		
Sub Total		529	43	503	28	5	173	30	43	14	403	1771		
7	00-15	180	4	128	5	1	47	8	7		100	480		
	15-30	115	3	117	3	1	5	7	6	2	50	309		
	30-45	150	2	101	8	1		4	4	1	120	391		
	45-60	120		170	1	1		11	2	2	10	317		
Sub Total		565	9	516	17	4	52	30	19	5	280	1497		
8	00-15	163	6	104	2		26	4	3	3	45	356		
	15-30	122	3	90	1		16	1	8	1	54	296		
	30-45	125	1	80	2		32	1	4	2	82	329		
	45-60	126	2	86	1		37	4	3	1	40	300		
Sub Total		536	12	360	6	0	111	10	18	7	221	1281		
9	00-15	142		76	1	2	40	7	8	1	40	317		
	15-30	118	2	62	2	1	38	3	4	2	53	285		
	30-45	105	2	71		1	41	10	6	2	66	304		
	45-60	110	6	52	2		44	8	3	2	50	277		
Sub Total		475	10	261	5	4	163	28	21	7	209	1183		
ROAD NAME:		CAIRO ROAD			STATION:		TC4		DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated			Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
10	00-15	153	1	59			34	14	7	2	63	333		
	15-30	106	1	48			27	10	4	1	38	234		
	30-45	105	2	37			38	4	5	1	36	228		
	45-60	136		34			32	8	6	4	64	284		
Sub Total		499	4	178	0	0	131	36	22	8	201	1079		
11	00-15	100	1	47	1		25	6	6	3	35	224		
	15-30	98	1	48			32	7	8	2	49	245		
	30-45	95	3	33		1	24	11	12	3	49	231		
	45-60	123	1	39	1	2	34	8	3	5	70	286		
Sub Total		416	6	167	2	3	115	32	29	13	203	986		
12	00-15	105	1	43	2		27	2	5	2	75	262		
	15-30	120	1	44	1	1	32	4	6	8	47	264		
	30-45	120		30	1	1	21	4	4		105	286		
	45-60	100	2	36		3	28	5	6		45	223		
Sub Total		445	4	153	4	5	106	15	21	10	272	1035		
13	00-15	110	1	35	1	2	32	7	8	4	80	280		
	15-30	105	1	39	3		57	9	7	2	100	323		
	30-45	120	3	29	2		86	6	4	1	90	341		
	45-60	115		52	3	1	33	4	2	5	92	307		
Sub Total		450	5	155	9	3	208	26	21	12	362	1251		

表 3.65 市内断面交通量調査結果(TC4_to North_14:00-21:00)

ROAD NAME:		CAIRO ROAD			STATION:		TC4	DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
14	00-15	75	40	72	6		80	7		3	70	353	
	15-30	85	25	30	1	2	66	7		7	75	298	
	30-45	165		155	2		80	15		9	75	501	
	45-60	129		100	9	1	60	34	1		100	434	
Sub Total		454	65	357	18	3	286	63	1	19	320	1586	
15	00-15	150		115	25		186	26	1	2	175	680	
	15-30	125		150	20		70	27	2	2	130	526	
	30-45	130		100	30		90	40		4	124	518	
	45-60	75		60	0		150	82	1		145	513	
Sub Total		480	0	425	75	0	496	175	4	8	574	2237	
16	00-15	165	6	155	11	1	120	125	1	2	125	711	
	15-30	120		133	15	1	30	75		10	165	549	
	30-45	135		129	8		135	80			110	597	
	45-60	70		87	19		100	40	2	2	120	440	
Sub Total		490	6	504	53	2	385	320	3	14	520	2297	
17	00-15	100		100	101	1	130	62		4	120	618	
	15-30	125		72	2	2	70	10	1	7	130	419	
	30-45	175		100	8		95	20			130	528	
	45-60	160		80	13	1	125	51			145	575	
Sub Total		560	0	352	124	4	420	143	1	11	525	2140	
ROAD NAME:		CAIRO ROAD			STATION:		TC4	DIRECTION:		TOTOWN			
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
18	00-15	125		75	10		130	85		2	200	627	
	15-30	100		60	4		125	110	3	1	130	533	
	30-45	80		62	20		128	80	3		128	499	
	45-60	80		80	11		100	85	1	1	140	498	
Sub Total		385	0	277	45	0	481	360	7	4	588	2157	
19	00-15	145		87	12		49	14		2	120	429	
	15-30	128	2	80	10		45	10		1	55	331	
	30-45	131		91	3		33	17	3	2	21	301	
	45-60	110		101	2		32	4			9	258	
Sub Total		514	2	359	27	0	159	45	3	5	205	1319	
20	00-15	60					25	7			11	103	
	15-30	80		9	2		28	17		2	10	148	
	30-45	30		5	1		20	14		2	19	91	
	45-60	40					19	11	1		3	74	
Sub Total		210	0	14	3	0	92	49	1	4	43	416	
21	00-15	45		12	1		11	6	1	1	2	79	
	15-30	50		10	1		10	2		2		75	
	30-45	50			1		24	4		1	3	83	
	45-60	35		1			28	3				65	
Sub Total		180	0	23	3	0	71	15	1	4	5	302	
Total		7188	166	4604	419	33	3449	1377	215	145	4941	22537	

表 3.66 市内断面交通量調査結果(TC4 to South_06:00-13:00)

ROAD NAME:		CAIRO ROAD			STATION:		TC4		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated			Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
6	00-15	42		32	2	5	17	1	6	3	6	114	
	15-30	59		41	7	1	31	7	6		3	155	
	30-45	64		32	5	6	37	1	3	1	3	152	
	45-60	84		78	7	1	55	3	6	1	6	239	
Sub Total		249	0	181	21	13	140	12	21	5	18	660	
7	00-15	70		75	7		64	2	8	1	17	244	
	15-30	71		70	20		53	1	6	2	12	235	
	30-45	78		45	11		51		12	5	16	218	
	45-60	82		65	18		50	1	8	6	14	244	
Sub Total		301	0	255	56	0	218	4	34	14	59	941	
8	00-15	63	58	7			48	6	7	3	7	199	
	15-30	81	57				65	1	12	1	6	223	
	30-45	71	67				70	8	12	5	7	240	
	45-60	97	66				58	3	22	3	6	255	
Sub Total		312	248	7	0	0	241	18	53	12	26	917	
9	00-15	96		60	33	1	79	13	20	10	20	332	
	15-30	82		61	16	2	97	18	7	6	39	328	
	30-45	87		40	10		60	7	10	1	5	220	
	45-60	72		57	11		50	3	5	1	1	200	
Sub Total		337	0	218	70	3	286	41	42	18	65	1080	
ROAD NAME:		CAIRO ROAD			STATION:		TC4		DIRECTION: FROM TOWN				
Hours		Car			Light		Medium	Heavy	Articulated			Total	
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle		
													
10	00-15	95		53	12	1	75	1	5	3	3	248	
	15-30	83		50	16	2	96	8	10	1	5	271	
	30-45	77		57	12	1	88	15	17	2	2	271	
	45-60	95		40	12	3	82	8	5	7	2	254	
Sub Total		350	0	200	52	7	341	32	37	13	12	1044	
11	00-15	63		41	15		101	10	11	2	13	256	
	15-30	85		51			88	13	17	3	6	283	
	30-45	75		47			75	22	15	4	19	257	
	45-60	95		43		11	73	6	13	1	8	250	
Sub Total		318	0	182	15	11	337	51	56	10	46	1026	
12	00-15	75		45	12	1	75	15	13	6	53	295	
	15-30	86		48	12	1	85	8	7	2	30	279	
	30-45	101		35	10	5	80	13	13	7	24	288	
	45-60	98		35	11		90	2	7	1	27	271	
Sub Total		360	0	163	45	7	330	38	40	16	134	1133	
13	00-15	100		225	12	1	94	3	3	5	73	518	
	15-30	95		240	10	1	85	10	8	1	34	484	
	30-45	100		175	10	5	77	10	13	1	42	433	
	45-60	100		250	10		54	8	5	6	22	455	
Sub Total		395	0	890	42	7	310	31	29	13	171	1888	

表 3.67 市内断面交通量調査結果(TC4 to South_14:00-21:00)

ROAD NAME:		CAIRO ROAD			STATION:		TC4		DIRECTION: FROM TOWN					
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
14	00-15	125	2	52	1	2	74	12	5	4	83	360		
	15-30	126	12	71		2	70	21	3	8	65	378		
	30-45	115	11	58	5		81	27	4	3	75	379		
	45-60	130	10	38	2	2	87	18	4	7	61	357		
Sub Total		496	35	219	8	6	312	76	16	22	284	1474		
15	00-15	140	7	63	3		96	26	1	41	58	435		
	15-30	131	6	71	1		96	18	4	4	56	387		
	30-45	122	17	62	4	1	97	32	1	10	48	394		
	45-60	103	15	47	2		66	38	4	7	51	333		
Sub Total		496	45	243	10	1	355	114	10	62	213	1549		
16	00-15	140	10	76	6	1	78	9	1	6	58	385		
	15-30	204	6	54	3	3	76	14	1	6	78	445		
	30-45	181	1	88	2	1	74	22	1	5	96	469		
	45-60	172		76	2	1	64	23	2	7	95	442		
Sub Total		697	17	292	13	6	292	68	5	24	327	1741		
17	00-15	181		86	3		106	11	2	8	125	522		
	15-30	206		78	2		96	20	1	5	119	527		
	30-45	209		66	7		101	18	1	4	82	488		
	45-60	167		72	7		92	24	8	7	97	474		
Sub Total		763	0	302	19	0	395	73	12	24	423	2011		
ROAD NAME:		CAIRO ROAD			STATION:		TC4		DIRECTION: FROM TOWN					
Hours		Car			Light		Medium	Heavy	Articulated		Articulated	Total		
		Passenger Car	Taxi	Mini Bus	Medium Bus	Large Bus	Pick Up	Light Truck	Semi-Trailer	Motor Cycle	Bicycle			
														
18	00-15	182		80	3	1	72	15	7	7	102	469		
	15-30	108		80	6		67	7	6	2	62	338		
	30-45	139		101	4		93	4	5	5	75	426		
	45-60	143		68	6	1	87	2	6	2	104	419		
Sub Total		572	0	329	19	2	319	28	24	16	343	1652		
19	00-15	110		59	3		60	7	4	1	69	313		
	15-30	128		49	2		69	8	2	2	63	323		
	30-45	123		33	2		40	5	2	2	42	249		
	45-60	109		32	3		60	2	2	2	60	270		
Sub Total		470	0	173	10	0	229	22	10	7	234	1155		
20	00-15	102		24	1		44	2		1	23	197		
	15-30	72		22	3		40	3	2	2	31	175		
	30-45	58		9	1		34		2	3	14	121		
	45-60	56		19	1		37	6		1	3	123		
Sub Total		288	0	74	6	0	155	11	4	7	71	616		
21	00-15	73		9	2		28	1	1		15	129		
	15-30	61		16	2		31			1	1	112		
	30-45	50		10			25	1			5	91		
	45-60	38		14			22	1	1		3	79		
Sub Total		222	0	49	4	0	106	3	2	1	24	411		
Total		6626	345	3777	390	63	4366	622	395	264	2450	19298		

資料-4 コンパウンド調査

1. 調査の目的

本調査は、コンパウンド地区の貧しい生活環境（社会経済一般、居住環境、都市衛生状況、COVID-19等の感染症の状況等）の実態とその改善方法を探るための基礎的資料とすることを目的とする。

2. 調査内容

- 調査範囲：内環状線 Phase-I の延伸ルートの影響範囲のコンパウンドの4地区（Kanyama, Chibolya, Misis, Heavy Industrial Area）
- 調査対象：一般居住者の世帯主または賃貸世帯・事業者（商業業務、工業・製造業等）
- 調査項目：1. 回答者プロフィール（性別・年齢・収入・学歴、土地建物・インフラ施設等）、2. 住環境（交通、自然災害等）、3. 衛生環境（上下水利用、トイレ利用、ゴミ処理、感染症・COVID-19状況、要望）、4. COVID-19影響と対策、5. 住環境の改善要望、（質問票は、添付資料の調査票を参照）

3. 調査方法

- 実施時期： 2021年4月12日～6月18日
- 実施方法： 各世帯・事業所訪問によるアンケート調査（標本調査）
- サンプル： 500サンプル（住宅世帯430、事業者70）
- 有効回答数：512サンプル（住宅世帯440、事業者72）

。

FORM 0 プロフィール

4. 基礎情報

世帯調査の回答者は女性が多く、事業所の調査では、男性が多い。

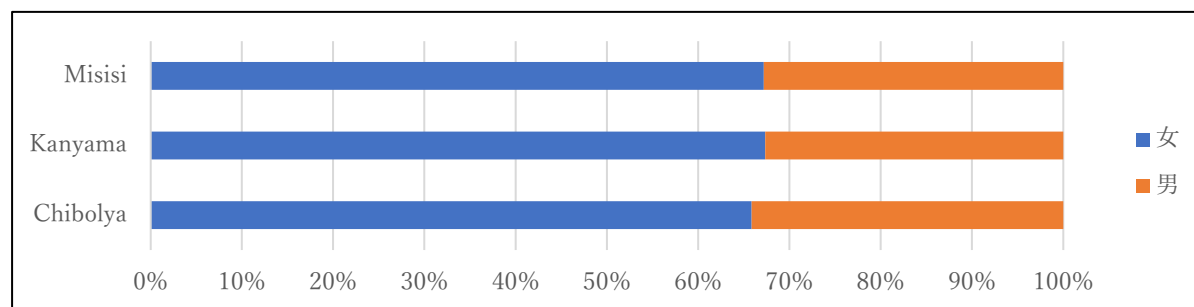


図 1 世帯 : Q4 性別 (回答者)

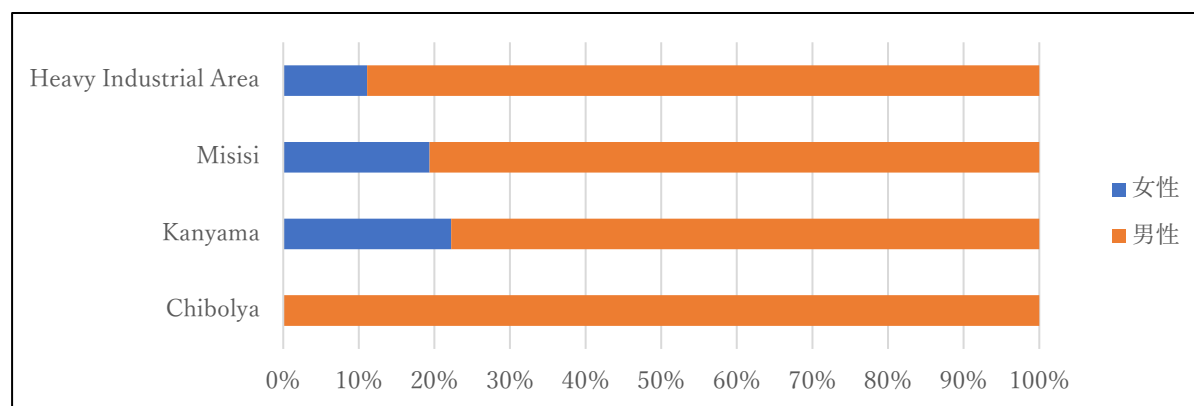


図 2 事業所 : Q4 性別 (回答者)

世帯調査の回答者の年齢は広く分布している。事業調査の回答者は世帯調査の回答者より高齢である。

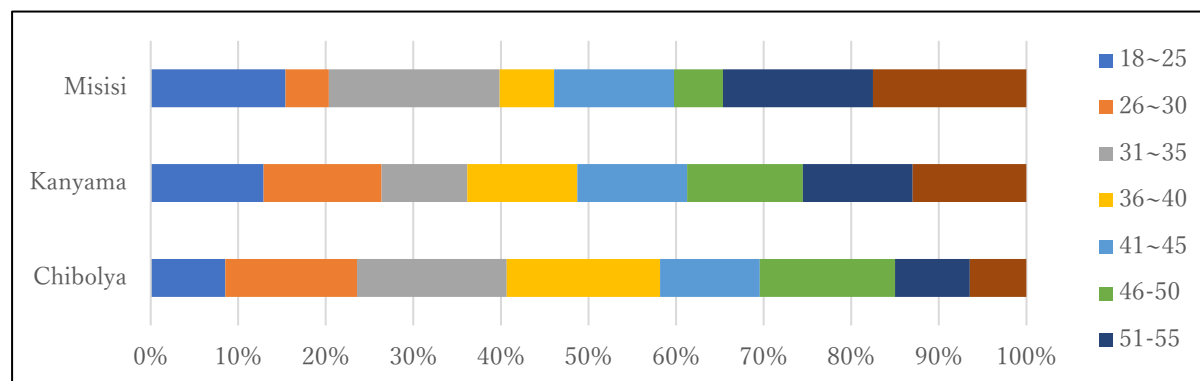


図 3 世帯 : Q5 年齢

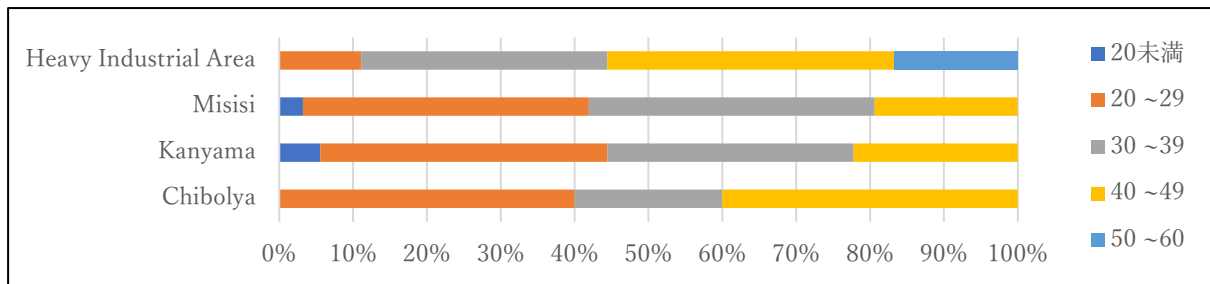


図 4 事業所 : Q5 年齢 (回答者)

回答者の学歴はおおむね中高等学校卒業か中退。事業者は大卒が多い。

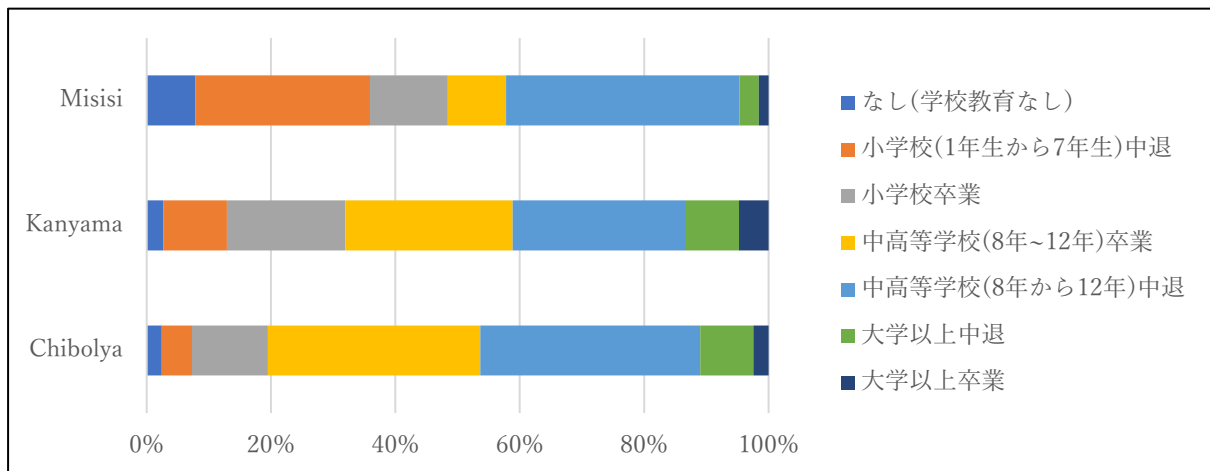


図 5 世帯 : Q6 学歴 (回答者)

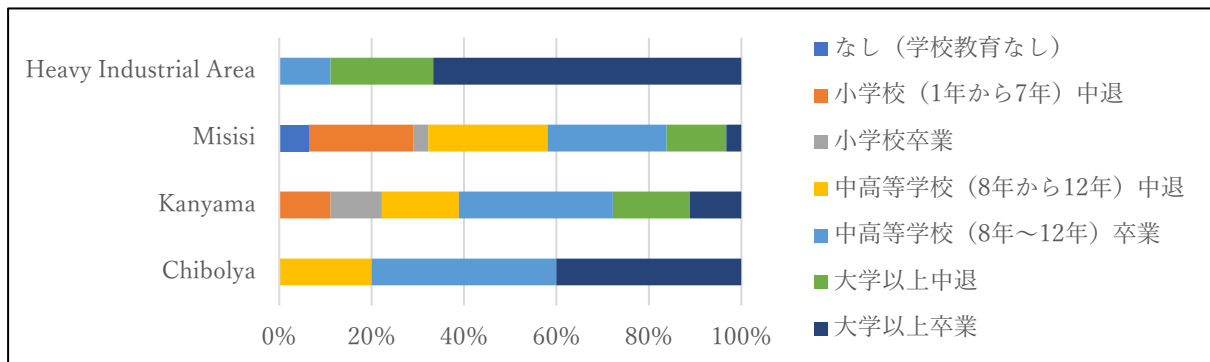


図 6 事業所 : Q6 学歴 (回答者)

世帯人数は 5 名以下が半数以上を占める。

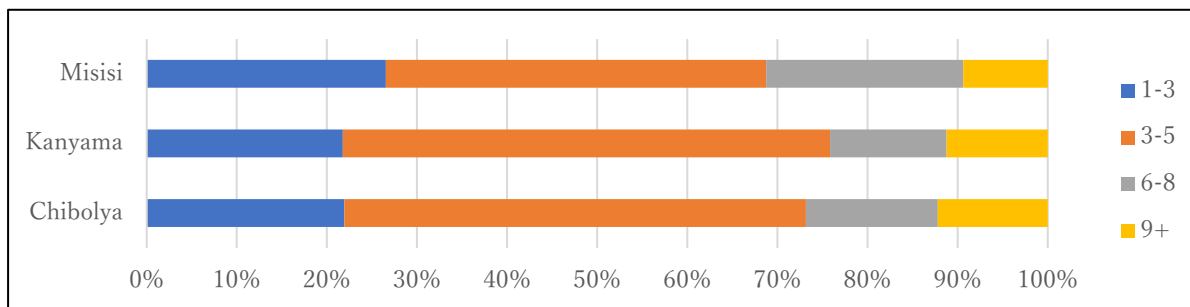


図 7 世帯 : Q7 世帯人数

重工業エリアを除くと、「非常に小規模」な事業所が多い。

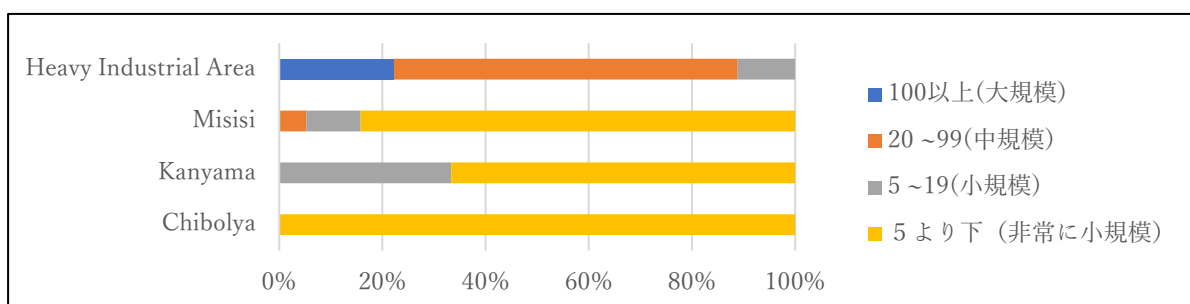


図 8 事業所 : Q7 フルタイム従業員数

月収は 2500 クワチャが 8 割を占める。しかし、2 割程度の人が「500 クワチャ未満」と回答している。

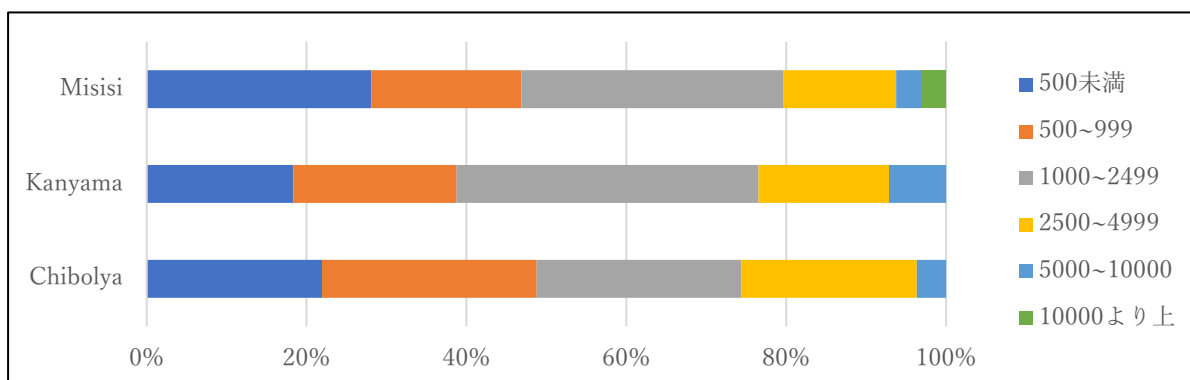


図 9 世帯 : Q8 月収 (Kwacha)

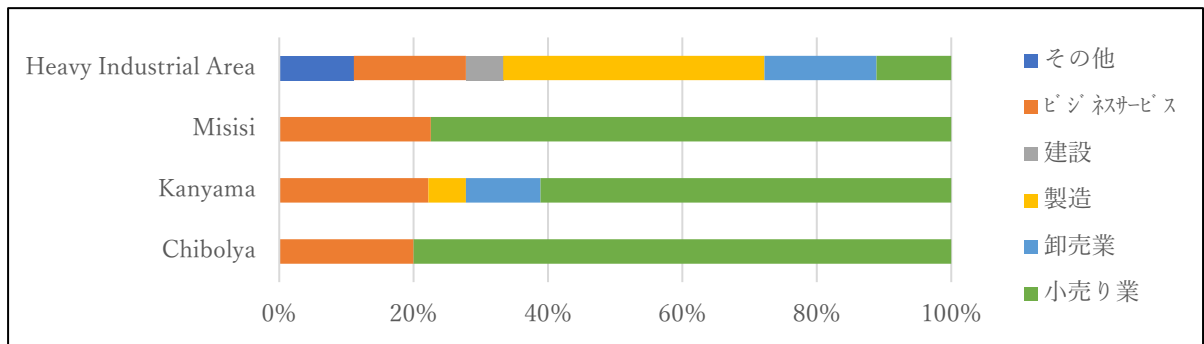


図 10 事業所：Q8 主な事業所活動の種類

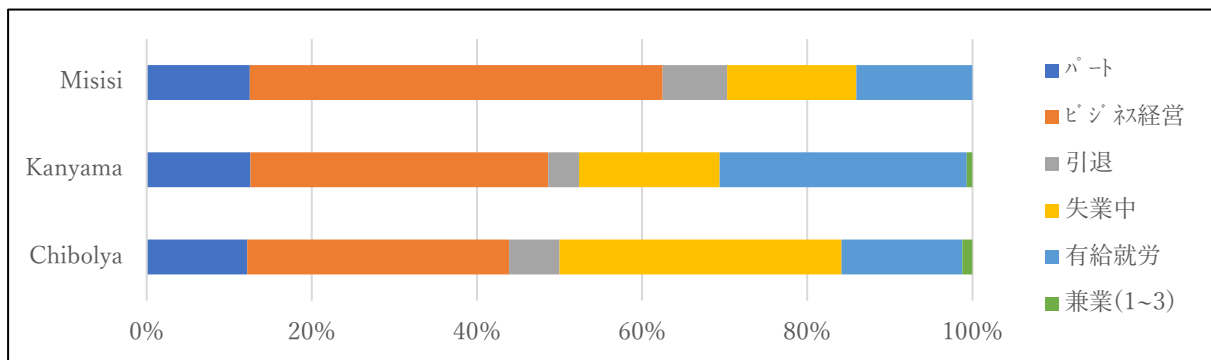


図 11 世帯：Q9 就業状況

住民の就業先はタウンシップ内がほとんどで、近隣や市街に通う人は少ない。

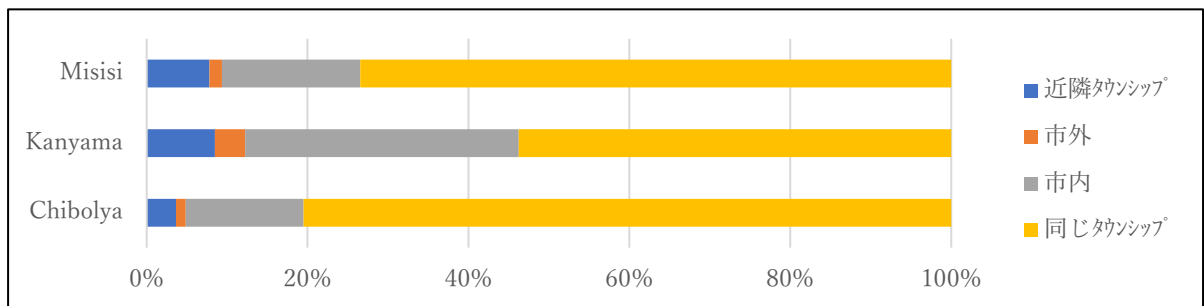


図 12 世帯：Q10 就業場所

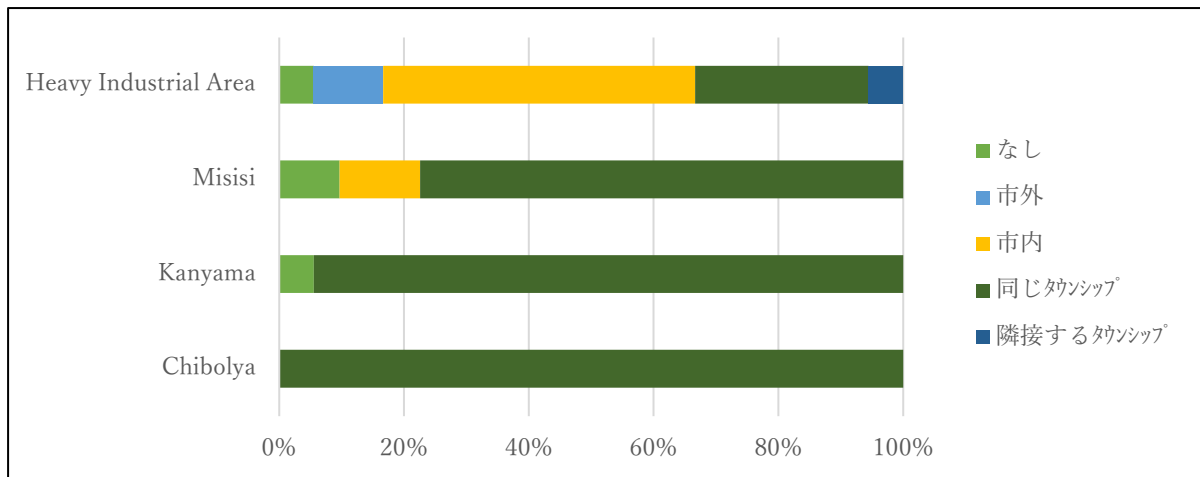


図 13 事業所：Q9 従業員の主な宿泊場所

5. 土地所有

土地所有形態では「賃貸」と答えた人が多い。事業者においても、工業エリアと Kanyama を除き、所有権を有していない状況が多い。

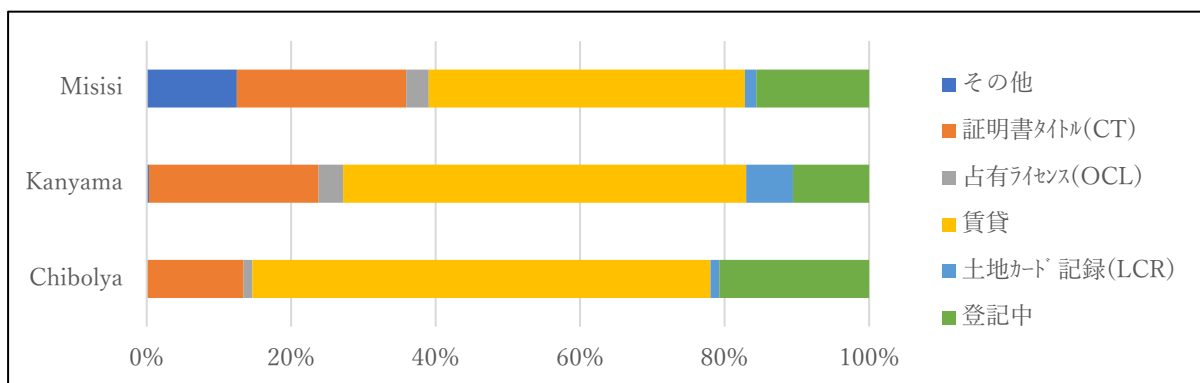


図 14 世帯：Q11 土地所有状

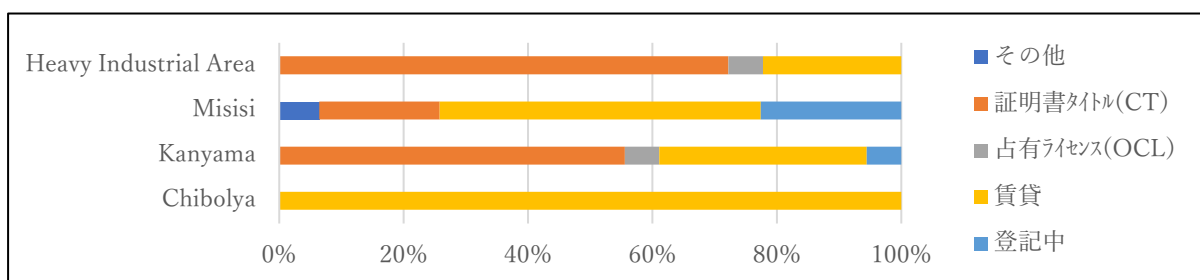


図 15 事業所：Q10 土地所有状況

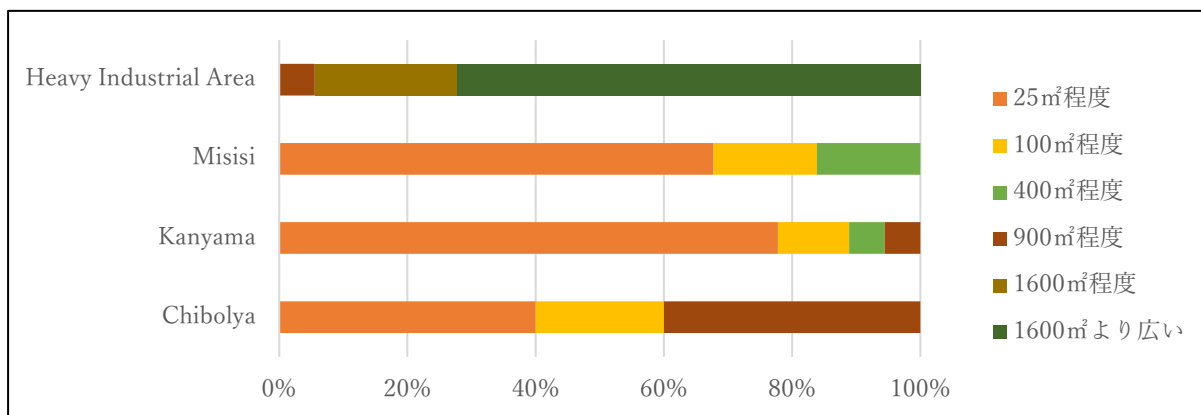


図 16 世帯 : Q11 事業所の敷地面積

大半の建物の構造はコンクリートブロックである。工業エリアでは、「スチールフレーム」や「鉄筋コンクリート」が見受けられる。

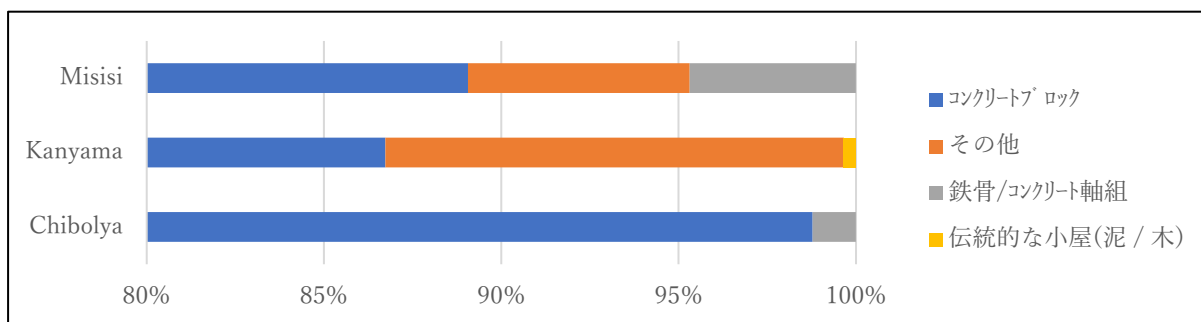


図 17 世帯 : Q12 建物構造

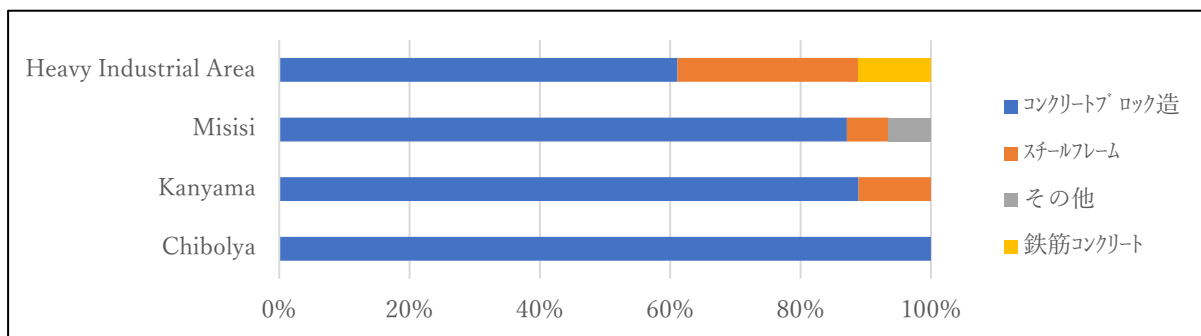


図 18 事業所 : Q12 ビル構造

住まいの部屋数は約半数が5以下。6から10部屋ある住まいも2割程度ある。

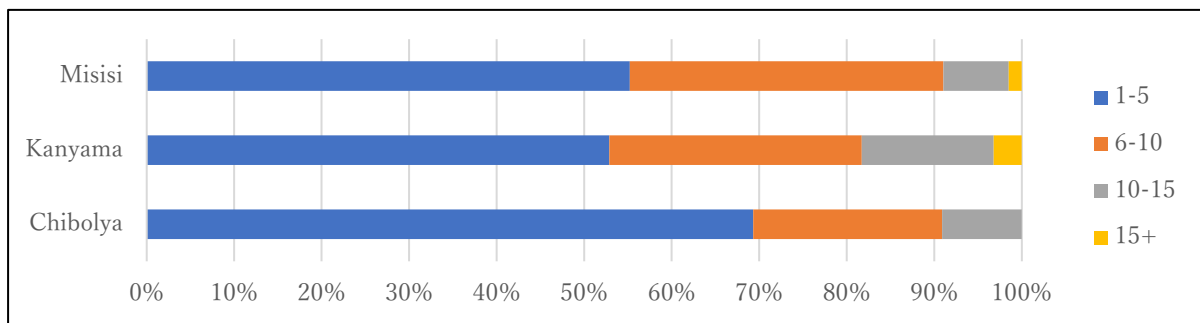


図 19 世帯 : Q13 部屋数

住宅の一部を賃貸している人がほとんどで、「0」と答えた人非常に少ない。おおむね2～3部屋を賃貸しているようである。

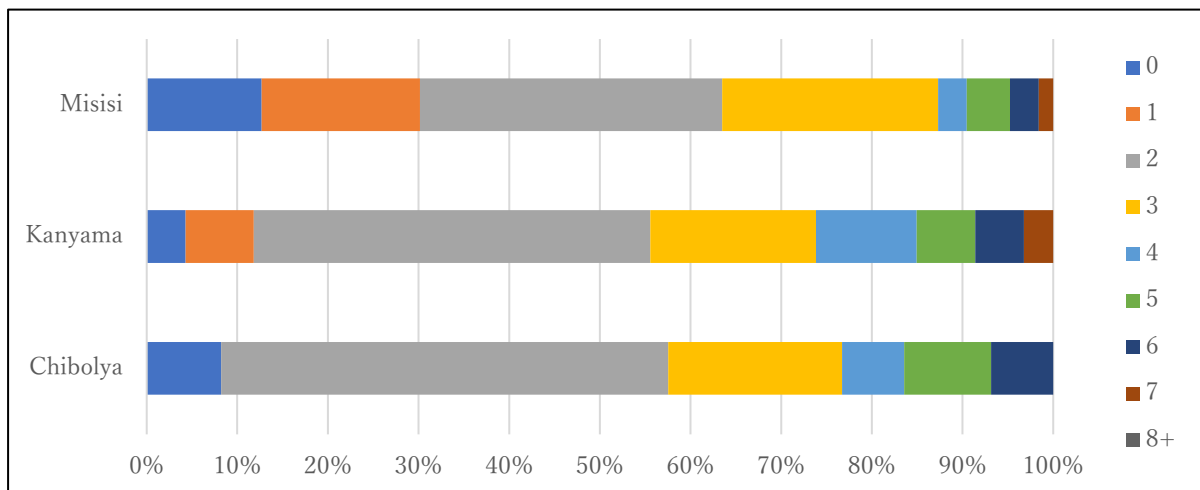


図 20 世帯 : Q14 賃貸部屋数

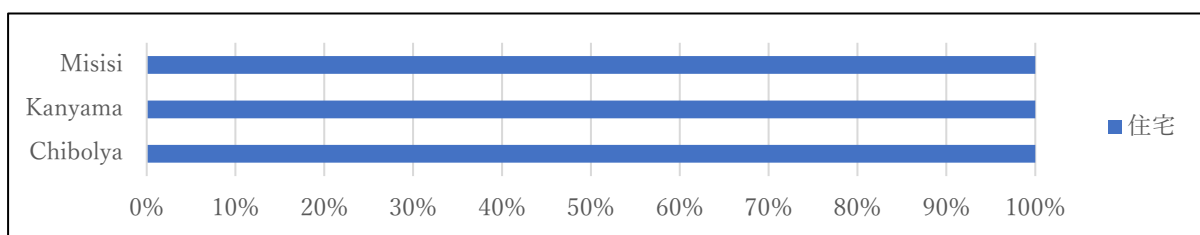


図 21 世帯 : Q15 建物利用

6. 電気、上下水、廃棄物処理

電力供給は、住宅で7～8割程度。しかし、事業所で「ない」と回答している人が Misisi と Kanyama で見受けられる。サーベイの方法や現地での再確認が必要であると思われる。

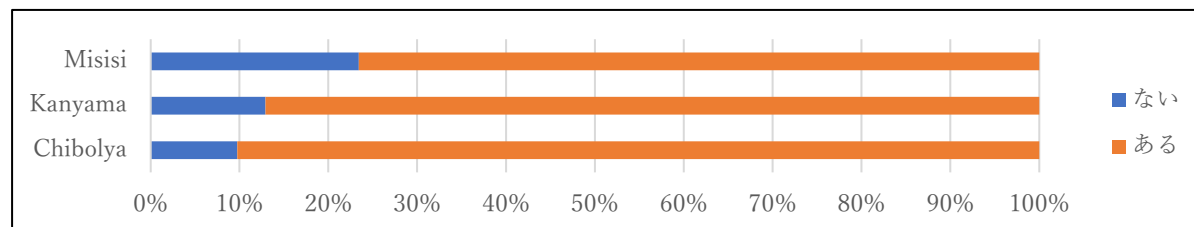


図 22 世帯 : Q16 電力供給

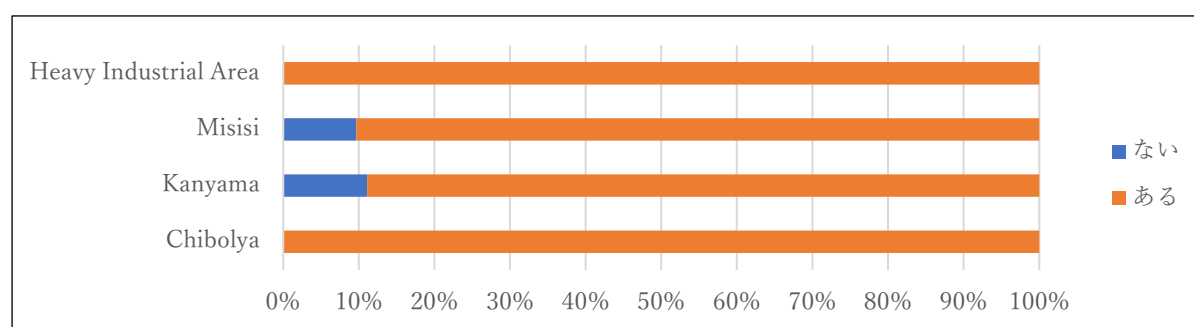


図 23 事業所 : Q13 電力供給

飲料水は、LWSC の供給が約半数を占め、その他は、ペットボトル等の飲料水を購入し運搬（ポータブル）しているようである。

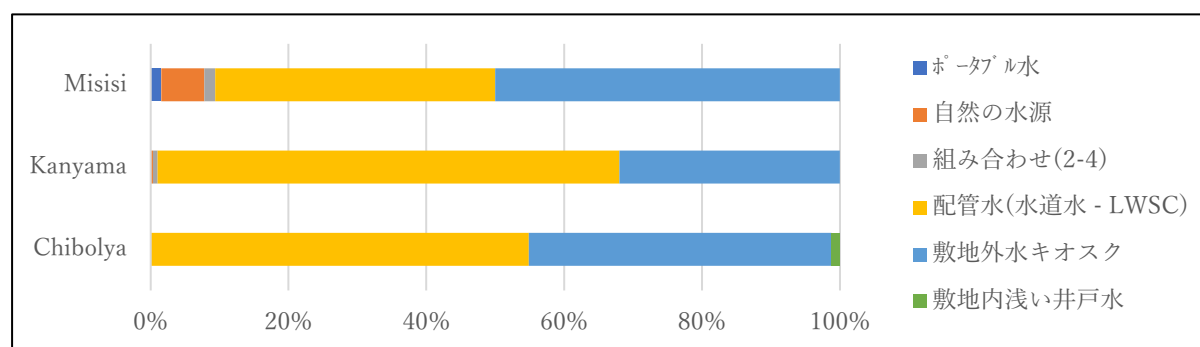


図 24 世帯 : Q17 飲み水供給源

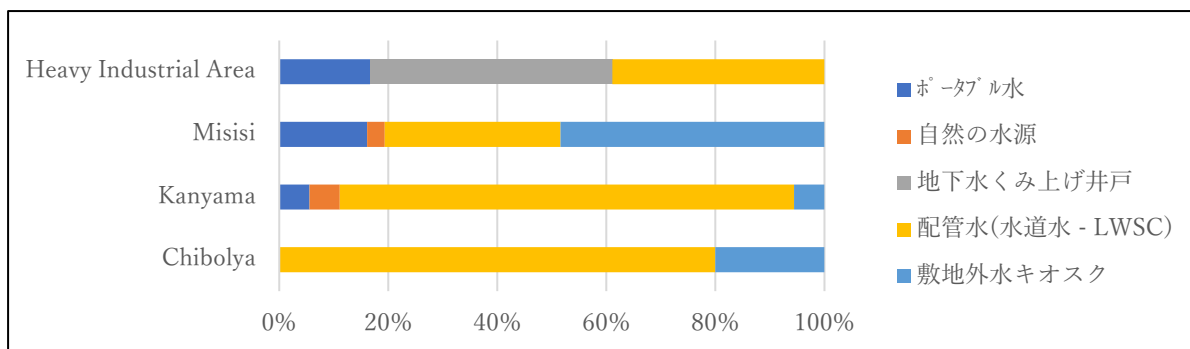


図 25 事業所 : Q14 飲み水供給源

水道供給に関しては、2 割弱が「水道水なし」と回答している。水道管が引かれていれば、ほぼ終日供給されているようである。

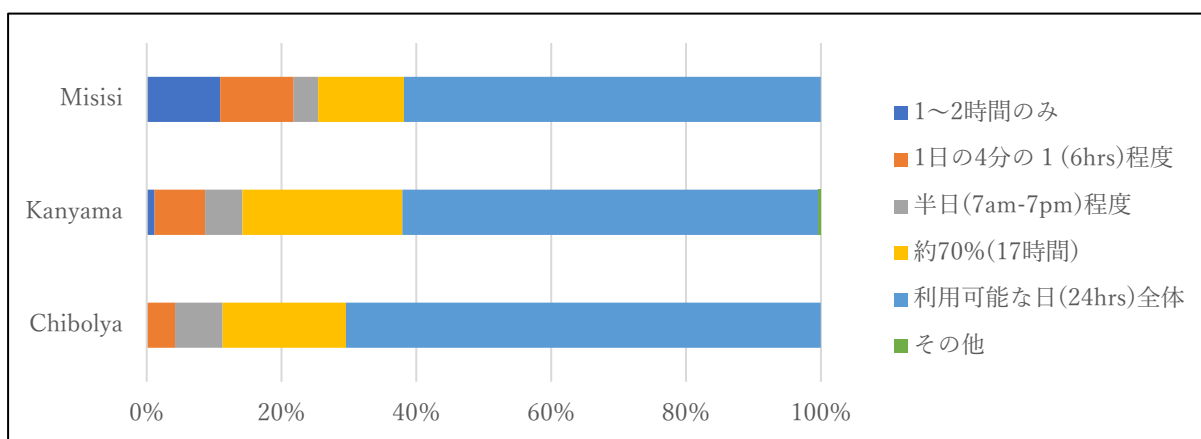


図 26 世帯 : Q18 水道供給時間

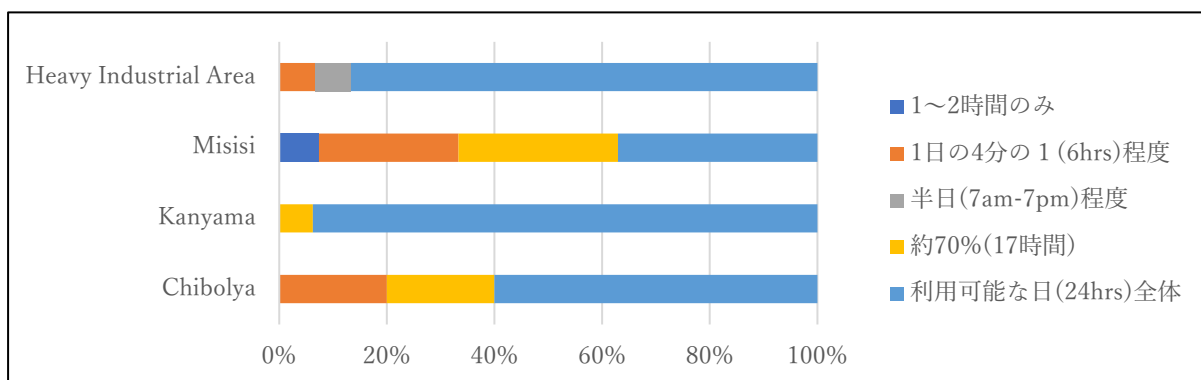


図 27 事業所 : Q15 水道供給時間

一日当たりの水の使用料はほぼ 100 リットル以下。Misisi で使用量が少ない。

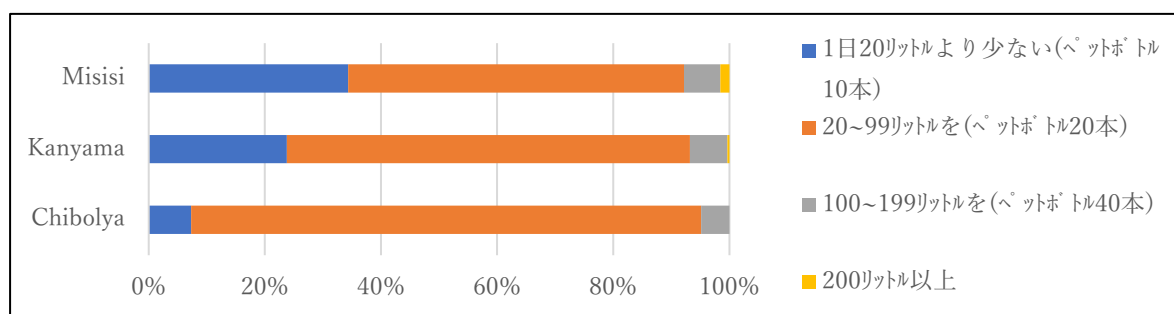


図 28 世帯 : Q19 1日あたりの水使用量 (リットル)

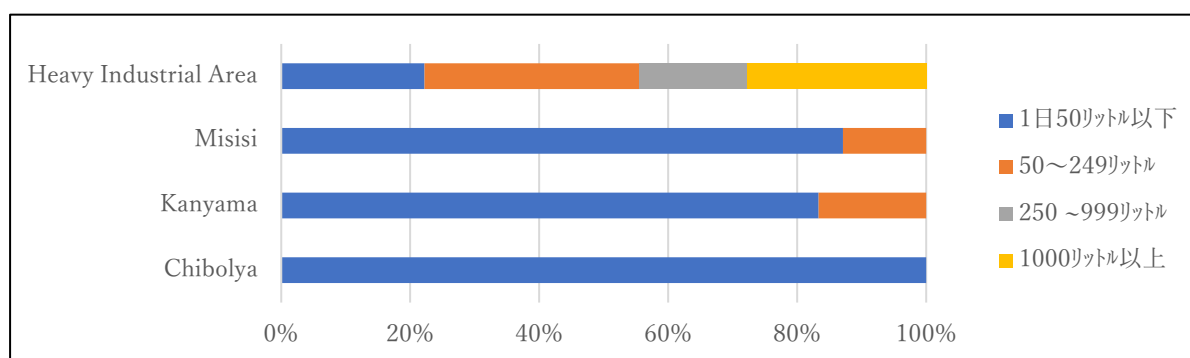


図 29 事業所 : Q16 産業利用以外の一日常たりの飲料水利用 (リットル)

一日の水支出額は 5 クワチャ以上が多い。Misisi では多と比べて支出額が少ない。

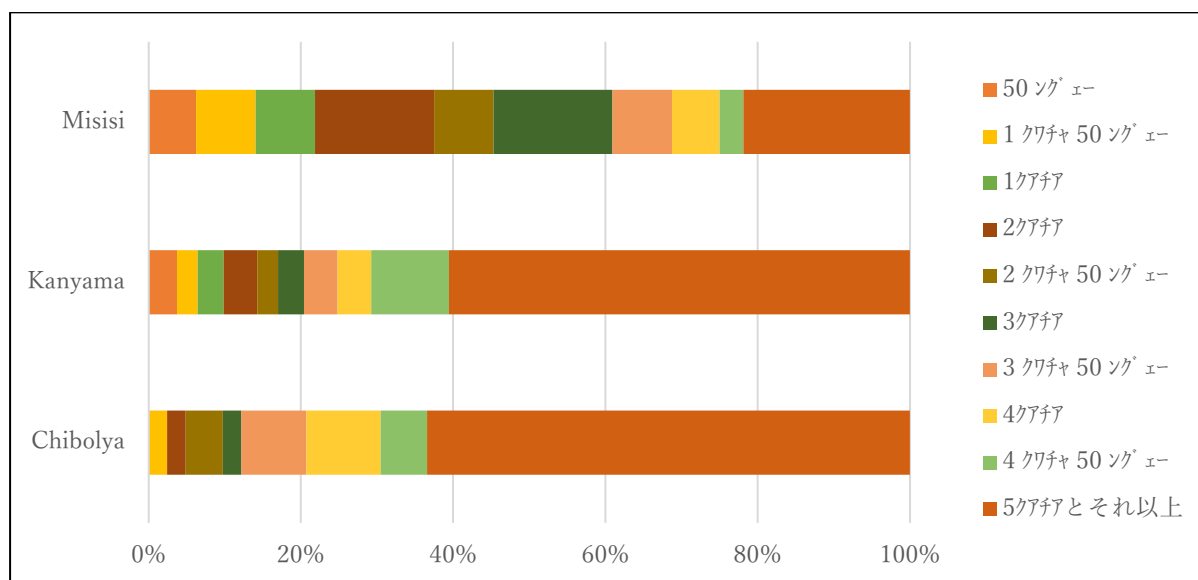


図 30 世帯 : Q20 1日あたりの水支出額

使用済の水は「敷地内の庭・空きスペース」に流す人が半数以上である。Chibolya では 8 割を占めている。下水施設はほぼない。事業者も工業エリア以外は下水施設の不備が露呈している。

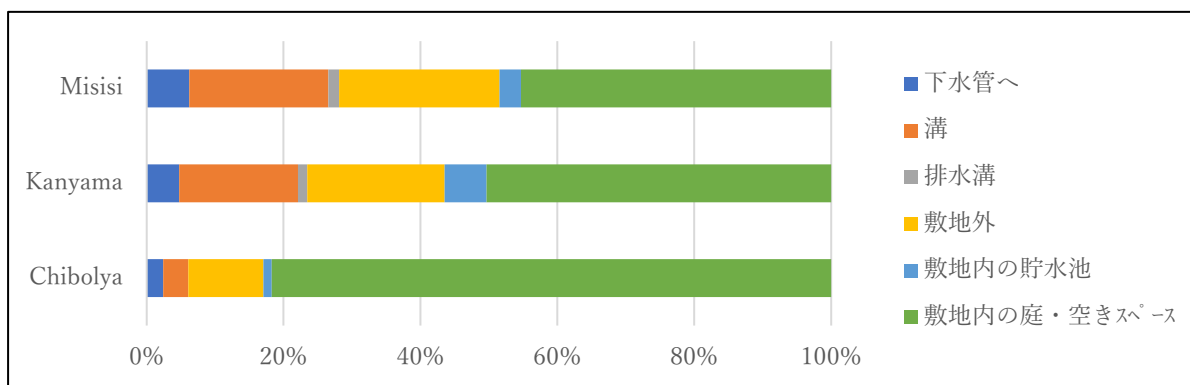


図 31 世帯 : Q21 主な排水方法

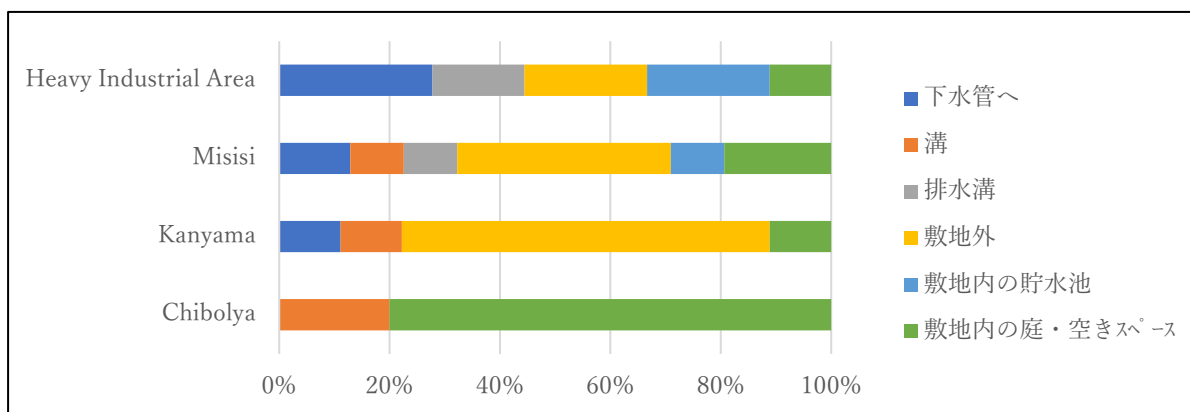


図 32 事業所 : Q17 主な排水方法

トイレの種類は穴を掘っただけの、「シンプルなピット便所」がほとんどである。工業エリアでは「水洗トイレ」の利用が半数以上を占めている。

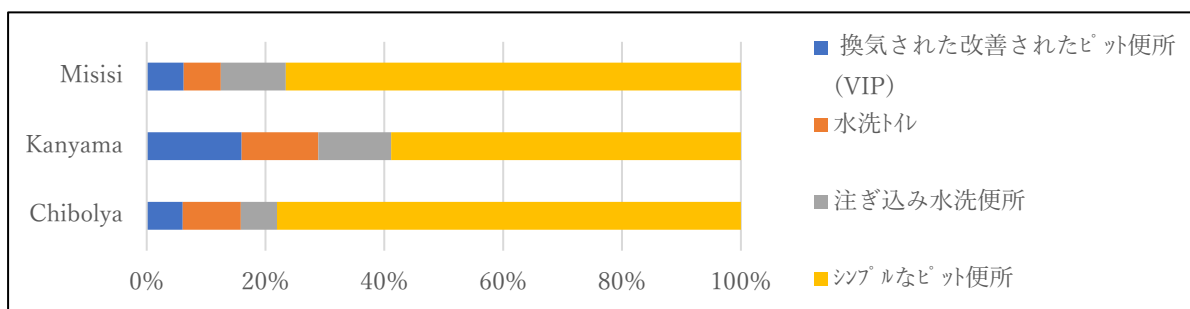


図 33 世帯 : Q22 自宅のトイレの種類

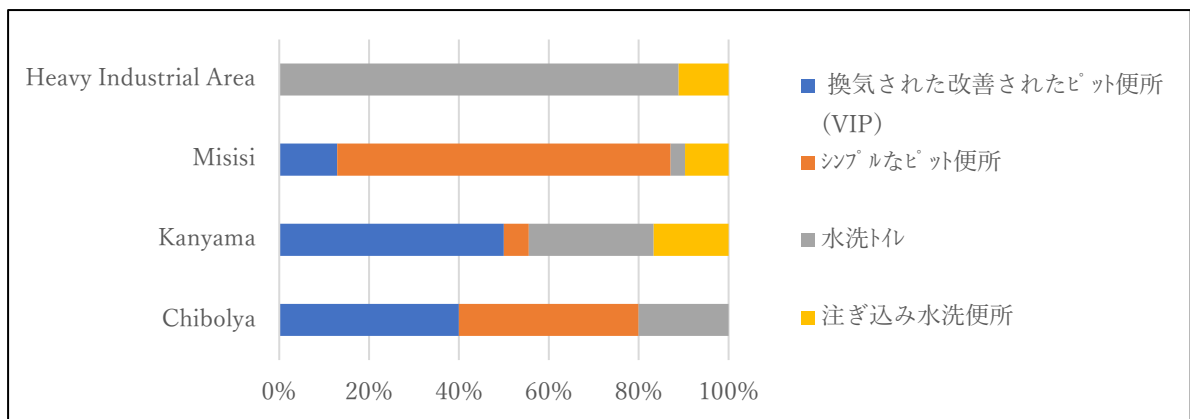


図 34 事業所 : Q18 職場のトイレの種類

毎日のごみ処理は、ある程度「サービス会社収集」があるものの、敷地外投棄や敷地内焼却も見受けられる。

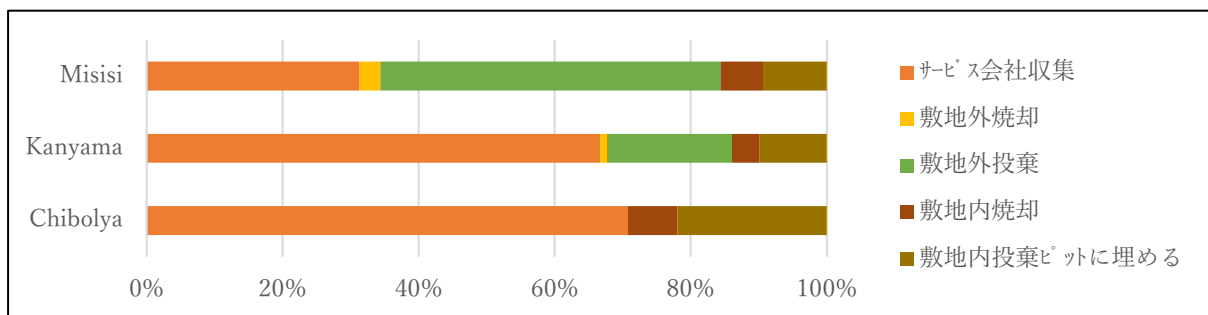


図 35 世帯 : Q23 毎日の主要ゴミ処理活動

逆に、事業者の「サービス会社収集」の割合が、住民より低くなっている。

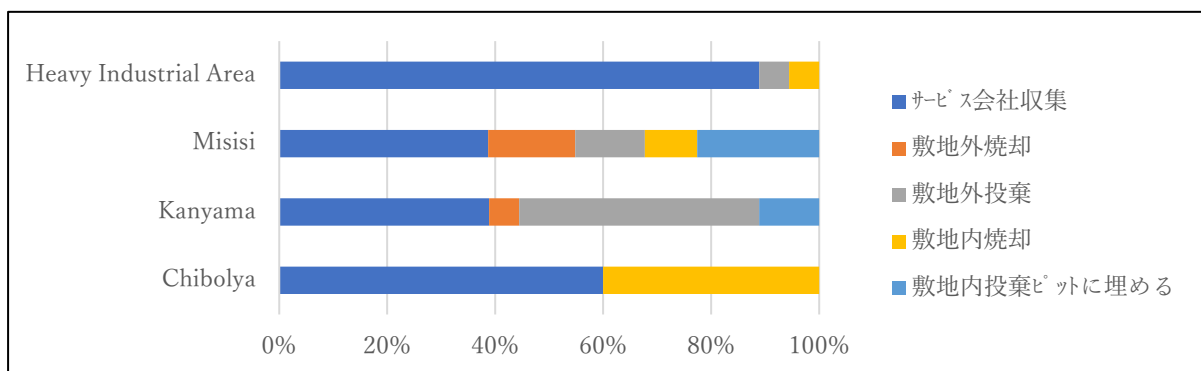


図 36 事業所 : Q19 毎日の主要ゴミ処理活動

FORM 2 住環境

7. COVID 19 以前の道路と交通

公共のバスやミニバスの利用が多い。その他はほとんど徒歩である。タクシー・ハイヤーはない。Chibolya の事業者で、「タクシー・ハイヤー」と回答した人が多いが、現地での確認が必要であろう。

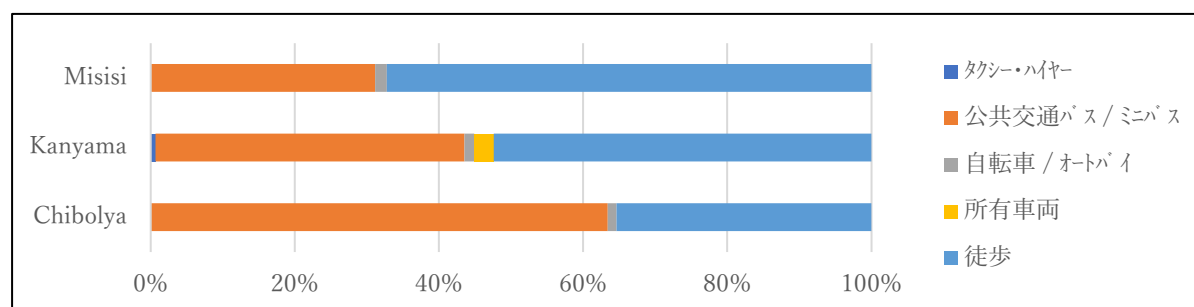


図 37 世帯 : Q24 日常の主要交通手段

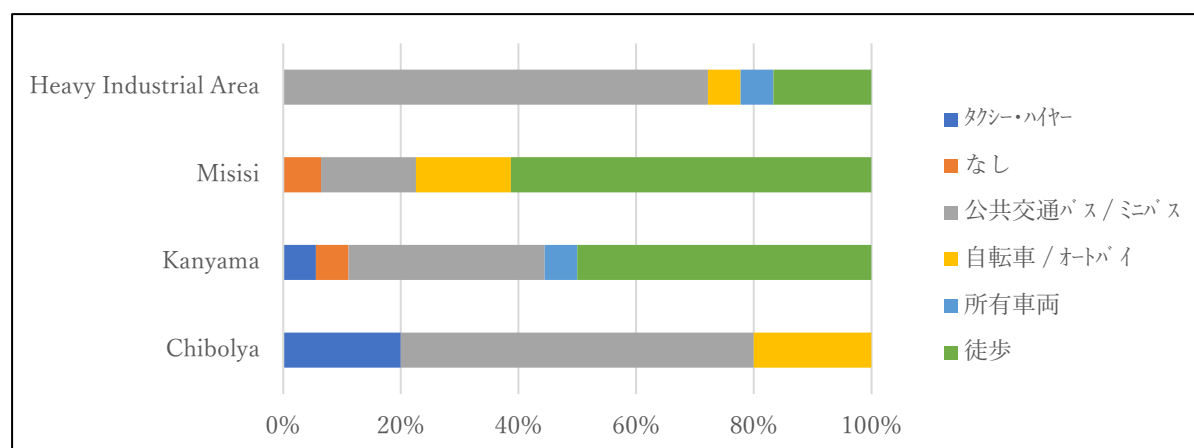


図 38 事業所 : Q20 フルタイム従業員の主な交通手段

公共交通の使用頻度に関しても尋ねた。半数以上が週一回以上利用している。Chibolya の事業者の多くが「月に 1 回か 2 回」と回答しているのが特徴的である。

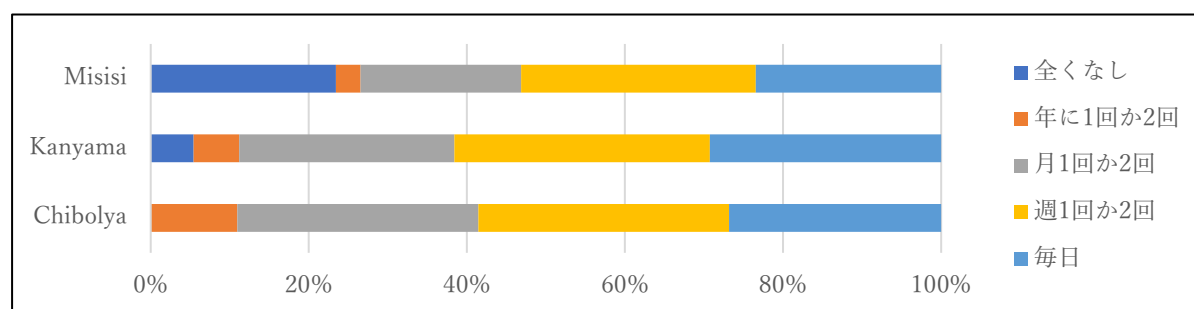


図 39 世帯 : Q25 公共交通の利用頻度 (バス、ミニバス)

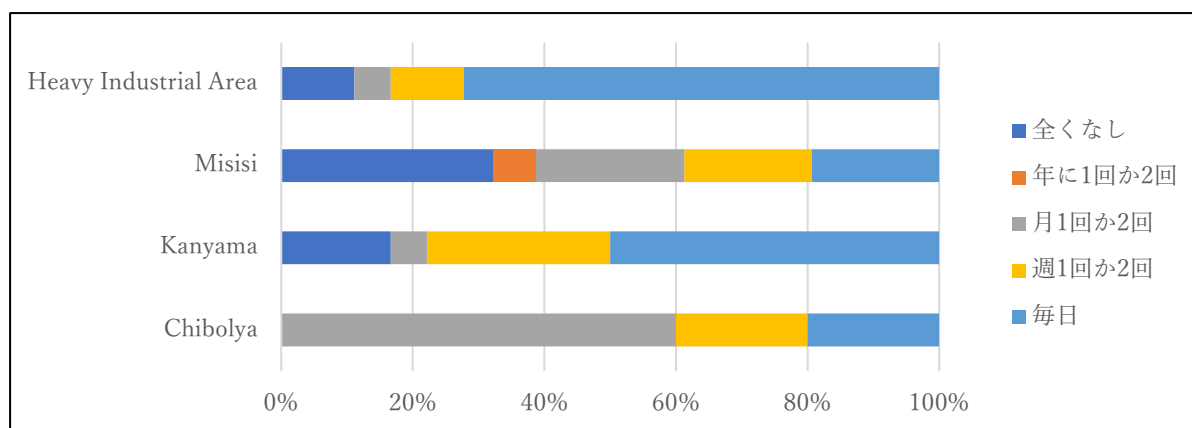


図 40 事業所 : Q21 公共交通の利用頻度 (バス、ミニバス)

1日の移動距離はおおむねタウンシップ内であるが、Chibolaでは2割弱が「5キロ以上」と回答している。

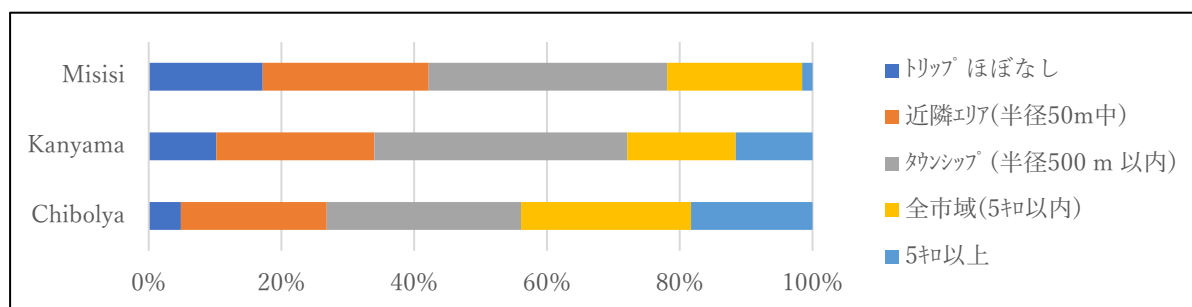


図 41 世帯 : Q26 1日の移動距離

住民から見た道路状況は「非常に悪い」が8割近くを占め、道路の状況には不満があるであろう。一方、事業者で「非常に悪い」と回答した人の割合は住民と比較すると少なく、事業所がある程度道路状況がよいところに立地していることが推測できる。

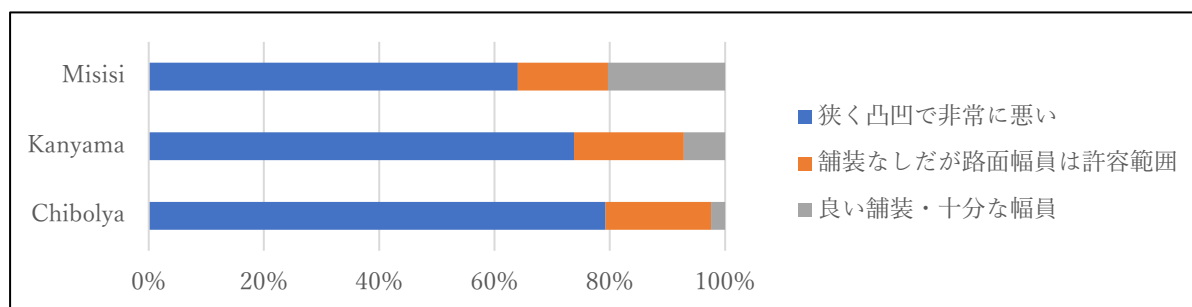


図 42 世帯 : Q27 主要道路から家までのアクセス道路の状況

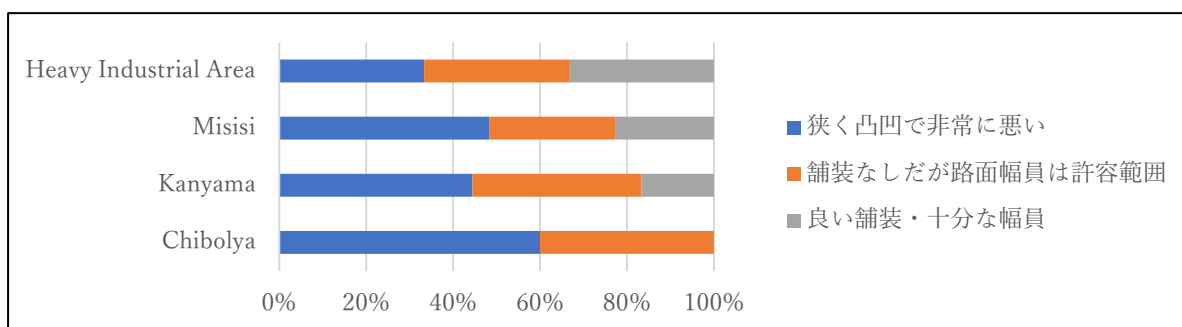


図 43 事業所：Q23 事業所施設から幹線道路へのアクセス道路の路面等物理的な状況

交通事故の状況は、住民の報告では多くはない。

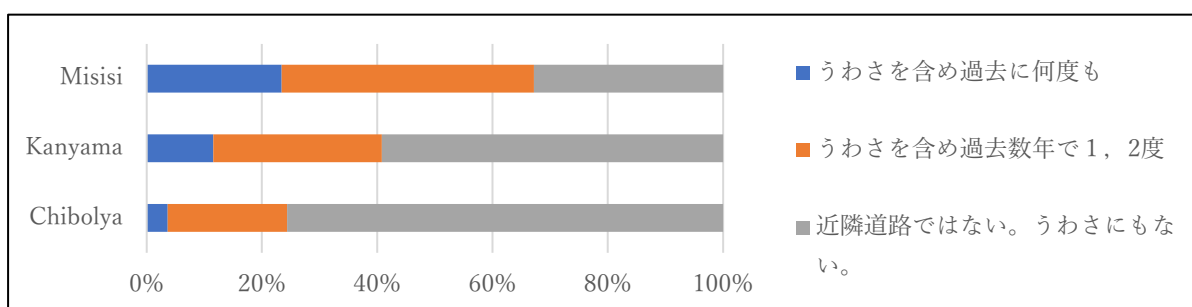


図 44 世帯：Q28 近隣道路での交通事故状況（うわさを含む回答者の意見）

道路改良に関しては、「路面改良」と「排水改善」を訴える人が多い。事業者も同様の傾向であるが、さらに拡幅を求める声も多い。

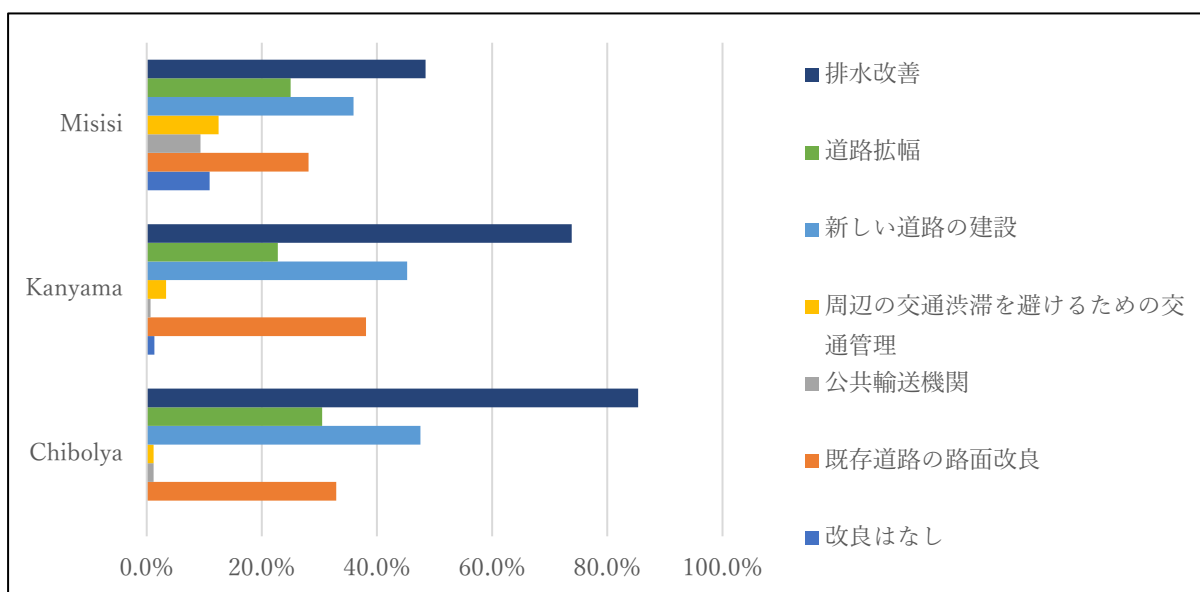


図 45 世帯：Q29 近隣道路及び交通改善の優先度

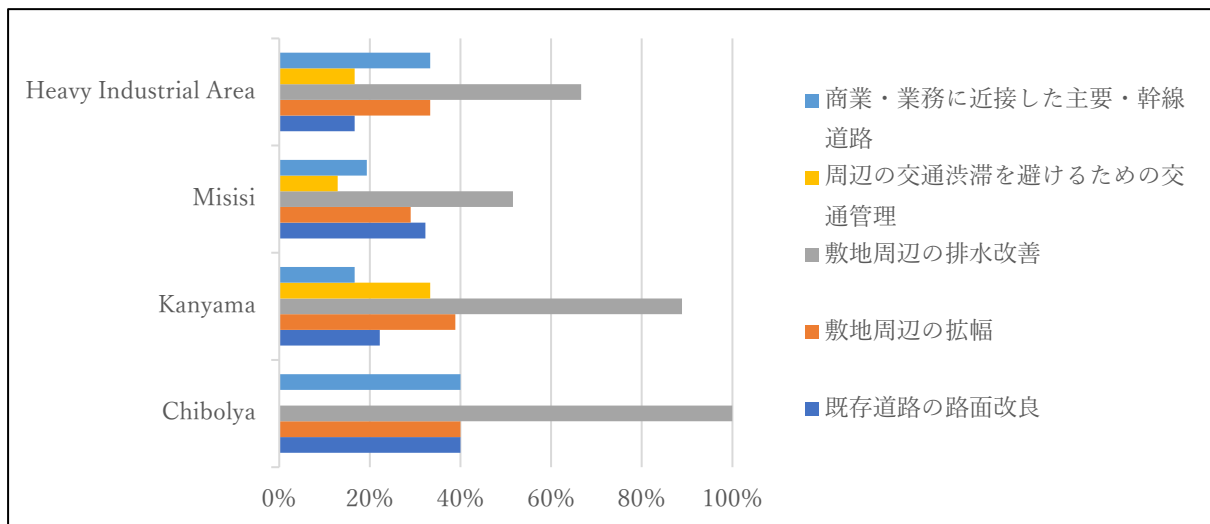


図 46 事業所：Q24 近隣道路改善の優先度（複数回答）

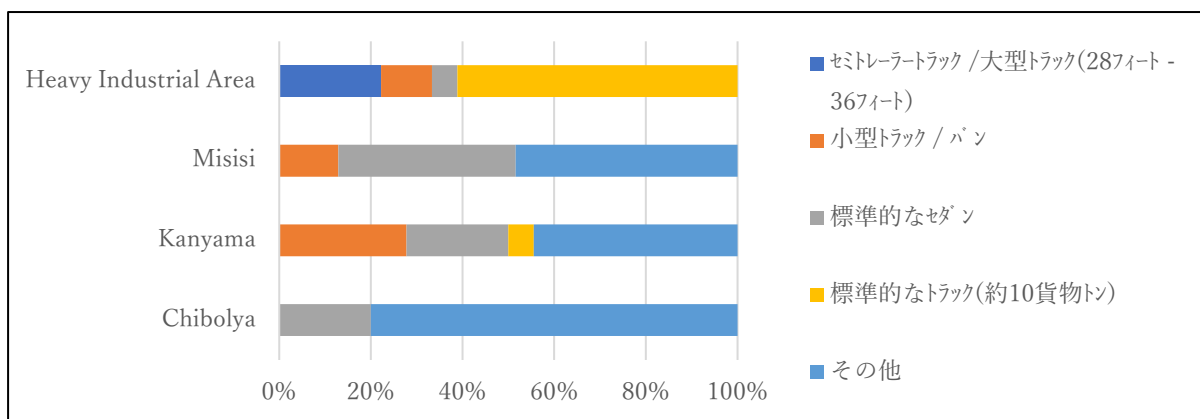


図 47 事業所：Q22 日々の商用車の利用（販売、輸出・輸入、配送、その他）

8. 自然災害リスク

氾濫・洪水の被害状況は、「数カ月に1回か2回」と回答している人が2割程度いる。Chibolya でこの傾向が強い。事業者においては、「雨季の全期間」と雨季におけるリスクを指摘している。

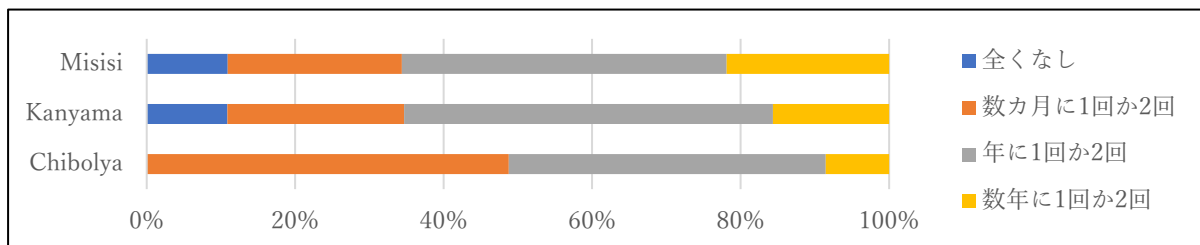


図 48 世帯：Q30 自宅の氾濫・洪水被害頻度

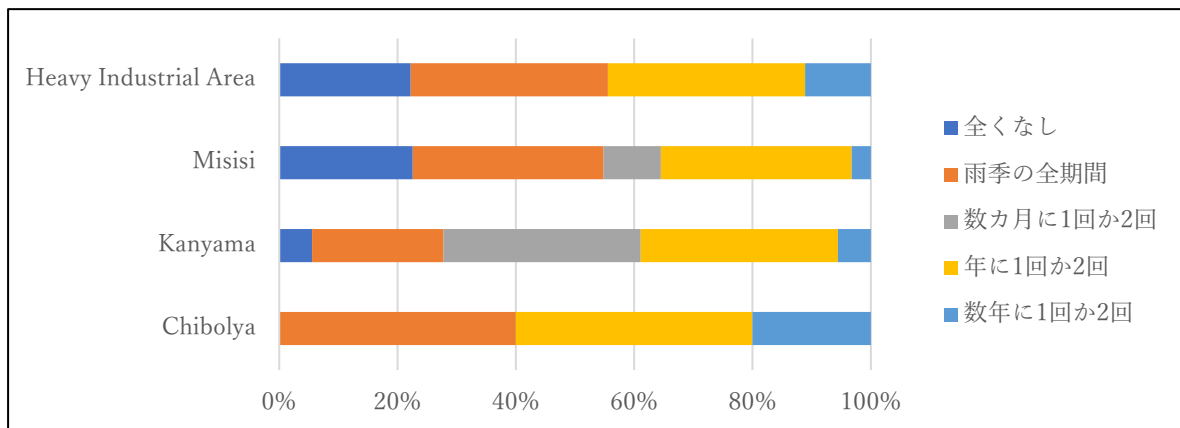


図 49 事業所：Q25 敷地での氾濫・洪水被害頻度

氾濫・洪水の深さは、「ひざ程度の高さ」がほとんどである。しかし、Misisi と Kanyama で「1 m 以上浸水」と回答した人もいる。

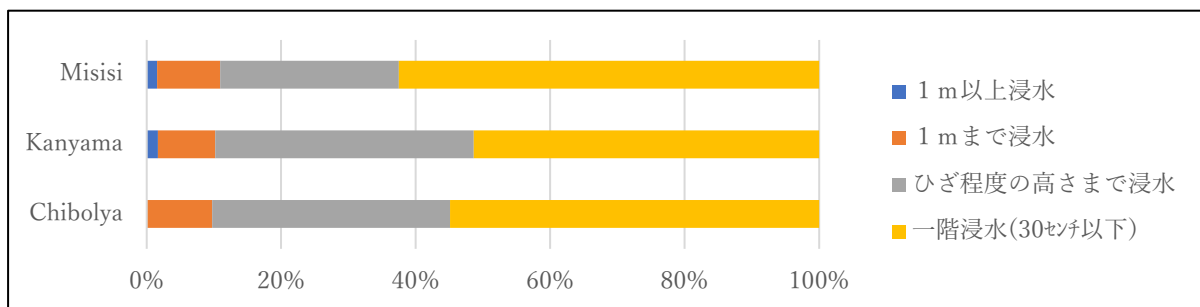


図 50 世帯：Q31 氾濫・洪水深

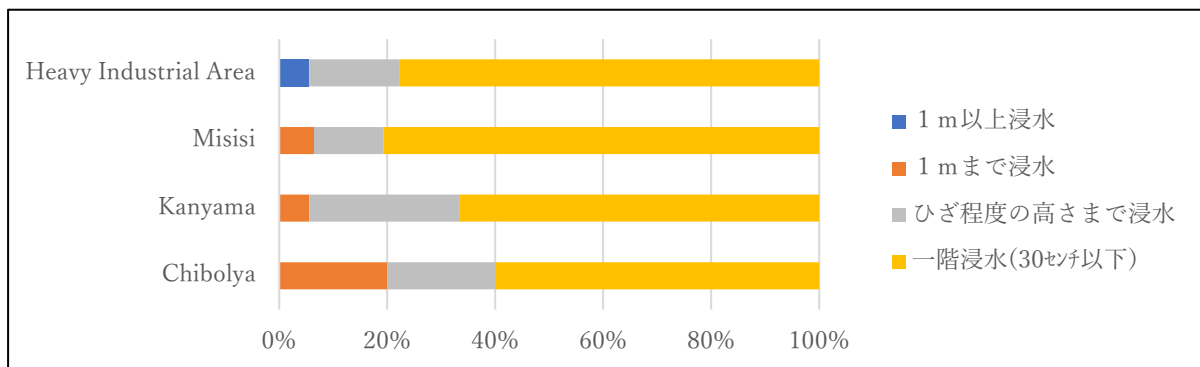


図 51 事業所：Q26 敷地での氾濫・洪水被害深度

水が引けるまで「1 週間以上」と回答している人が多く、一度浸水すると長期に亘り疫病等のリスクにさらされる状況が想像できる。

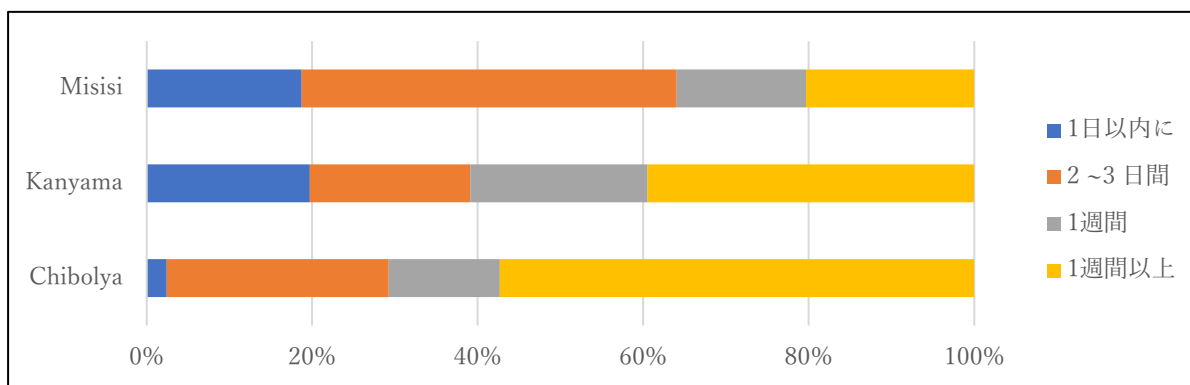


図 52 世帯 : Q32 氾濫・洪水発生から水が完全に引けるまでの日数

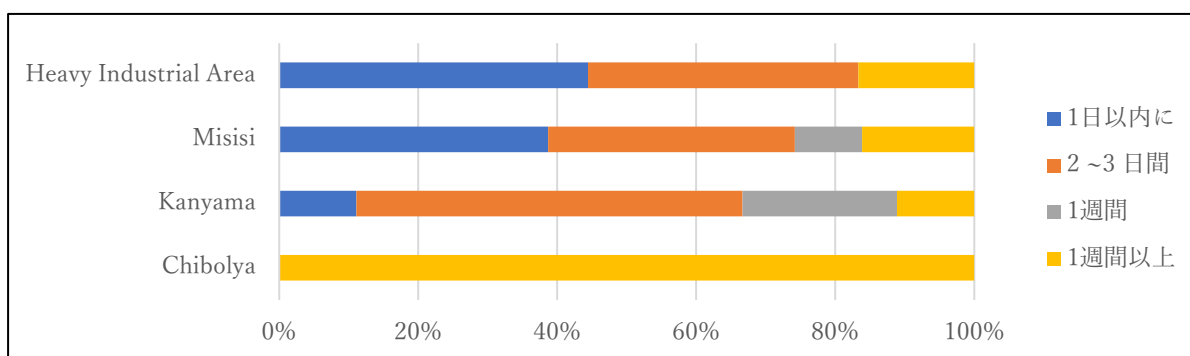


図 53 事業所 : Q27 氾濫・洪水発生から水が完全に引けるまでの日数

特に、Chibolya では、「ポンプで排水」や消毒作業はなく、「対応なし活動なし」と回答している人がほとんどである。

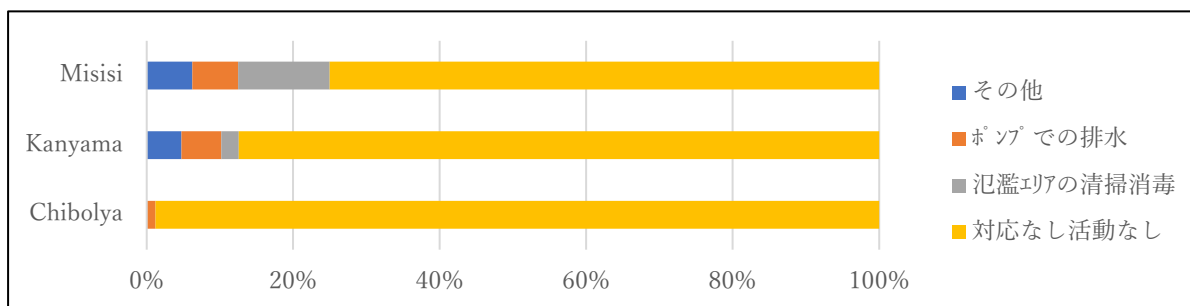


図 54 世帯 : Q33 過去の公共機関による氾濫・洪水の自宅被害への対応

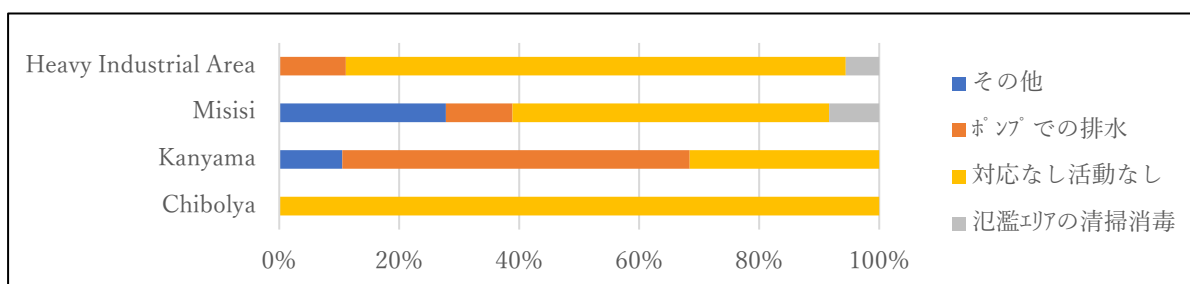


図 55 事業所 : Q28 過去の公共機関による氾濫・洪水の社屋施設等被害への対応

FORM 3 衛生

9. 上下水利用状況

処理前の水源の水質に関して、「直接飲料可」と回答している人が半数以上いる。飲料水は水道やペットボトルという回答もあったが、水源から直接飲んでいる実態がうかがえる。

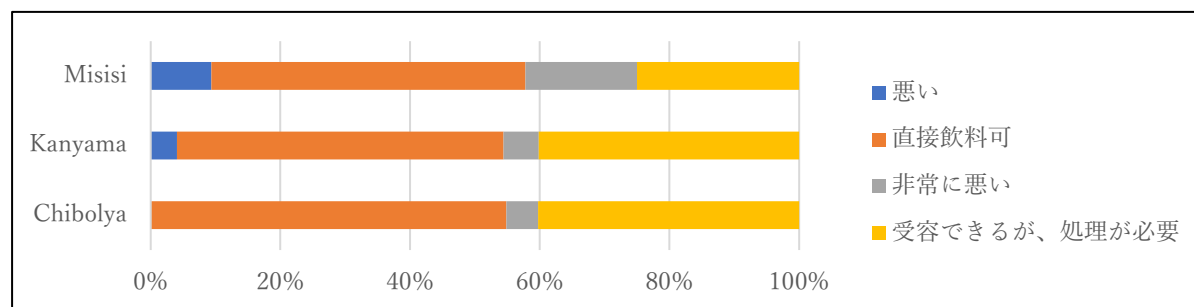


図 56 世帯 : Q34 処理前の水源の見た目の水質

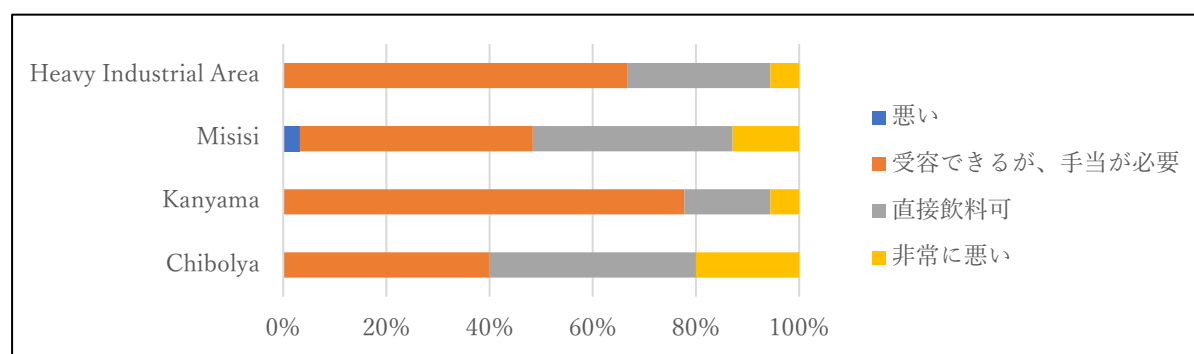


図 57 事業所 : Q29 処理前の水源の見た目の水質

水源が原因での伝染病の実態の報告は少ない。事業者からも際立った回答はない。

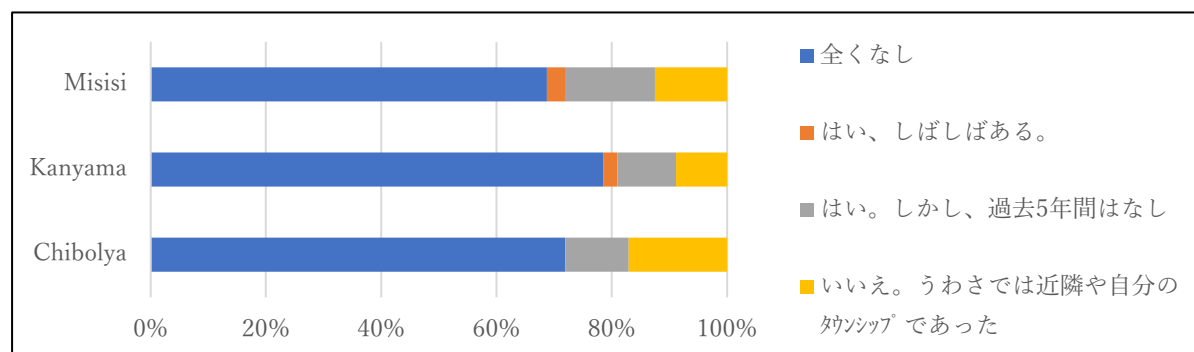


図 58 世帯 : Q35 主要水源が原因での伝染病の原因

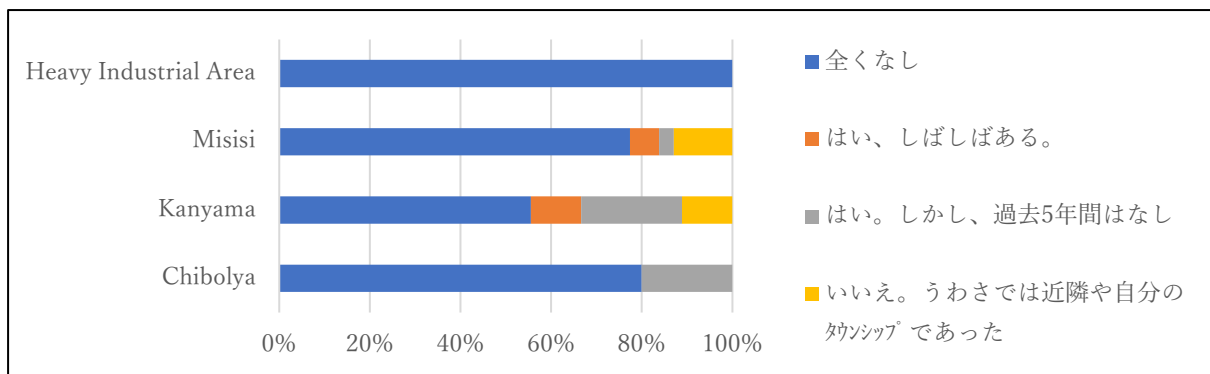


図 59 事業所 : Q30 主要水源が原因での伝染病の原因

「飲料水、その他の直接使用に対する処理はない」と回答している人が多い。水質に関してはある程度信頼しているようである。

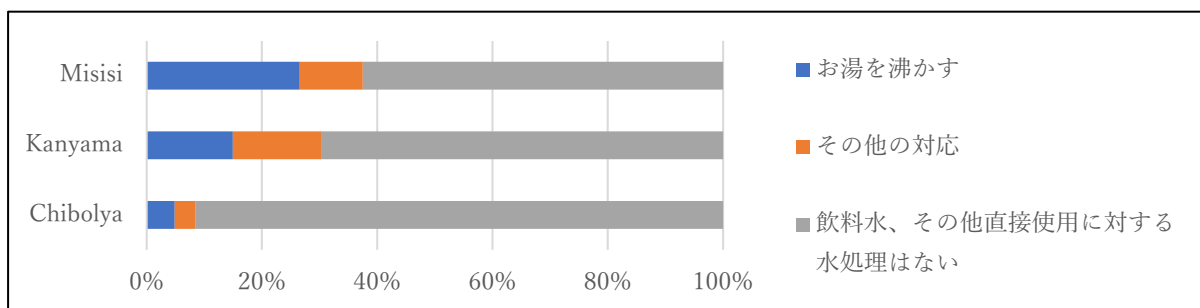


図 60 世帯 : Q36 毎日の飲料水の処理

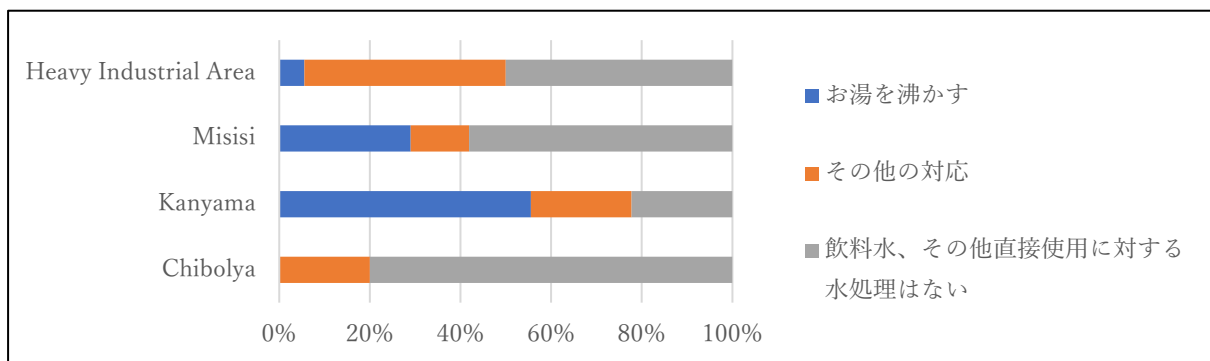


図 61 事業所 : Q31 毎日の飲料水の処理

自宅のトイレを他の家族とシェアしている人がほとんどである。これは共同のトイレという認識なのか「自宅のトイレ」を共有して答えているのか確認が必要である。

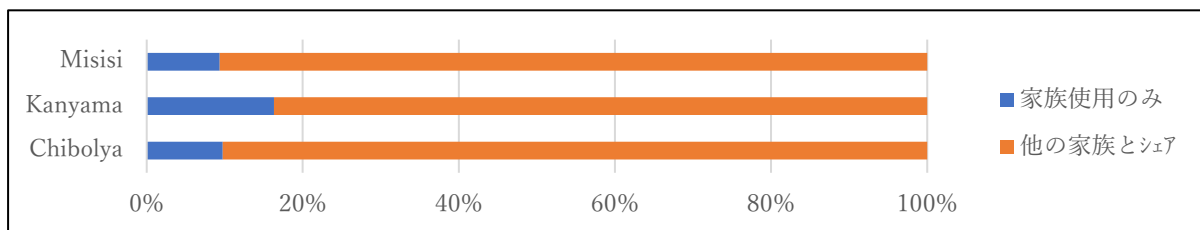


図 62 世帯 : Q37 他の世帯の人の自宅トイレ使用

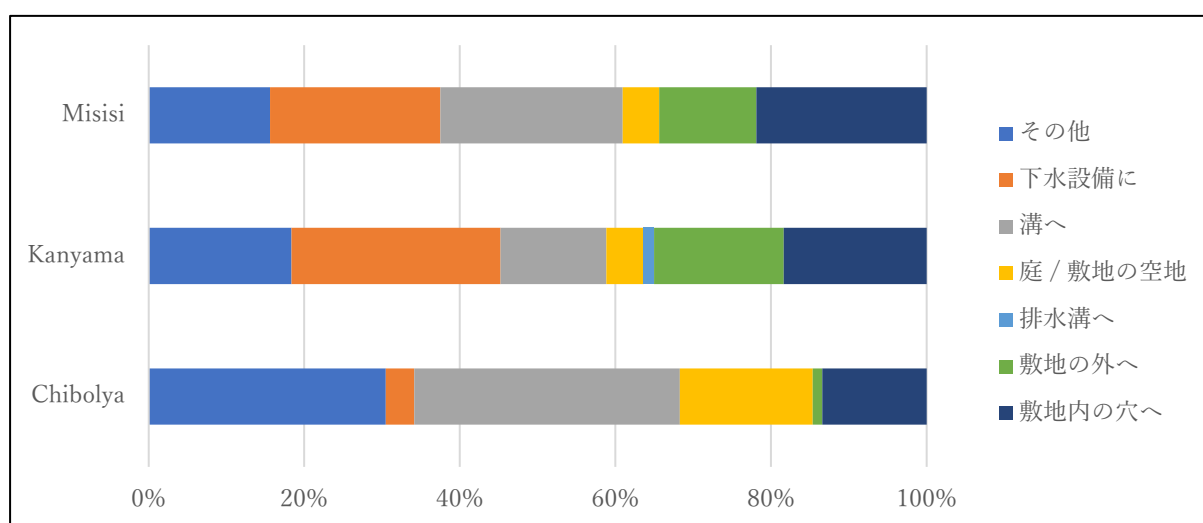


図 63 世帯 : Q38 家にトイレがない場合の糞便・排泄物の日常的の処理

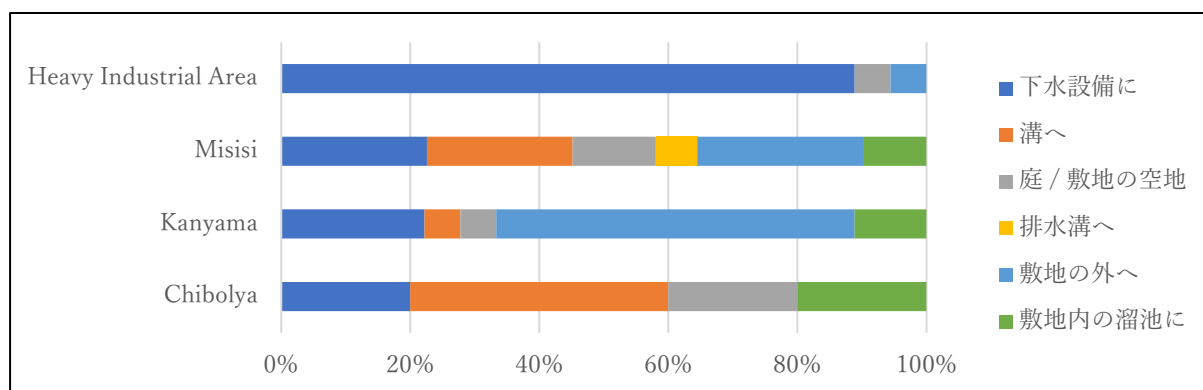


図 64 事業所 : Q32 敷地内トイレがない場合の糞便・排泄物の日常的の処理

トイレの後の手洗いに関しても尋ねた。大半の人が石鹸での手洗いをしていると回答している。

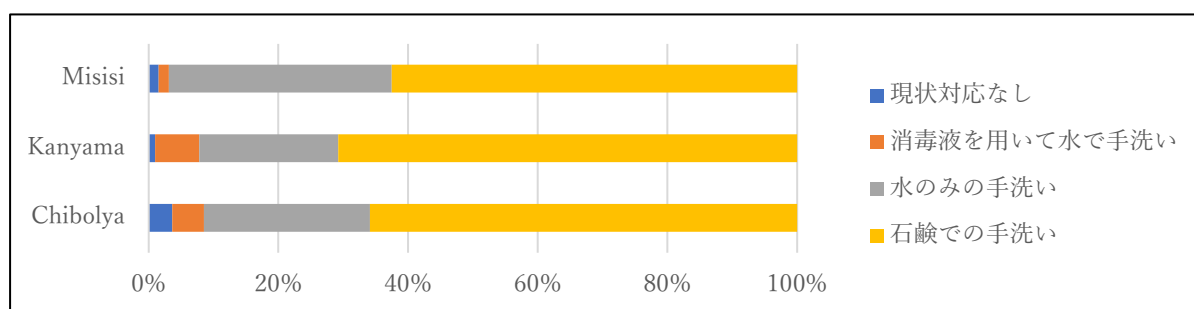


図 65 世帯 : Q39 排便後の手洗いの方法

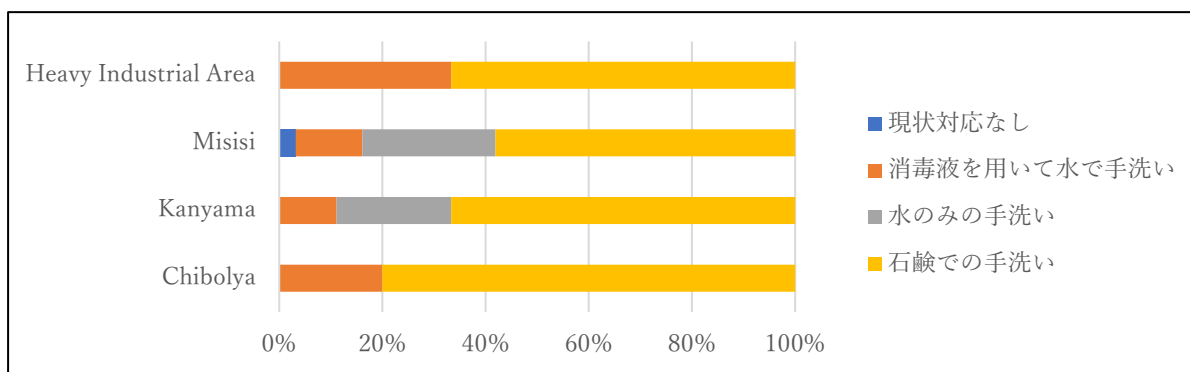


図 66 事業所：Q33 排便後の手洗いの方法

住民の手洗いの意識は比較的高く、「作業後、よく洗う」が8割を占める。逆に事業者の方が、「水が不十分なためたまに」と回答している人の割合が多い。

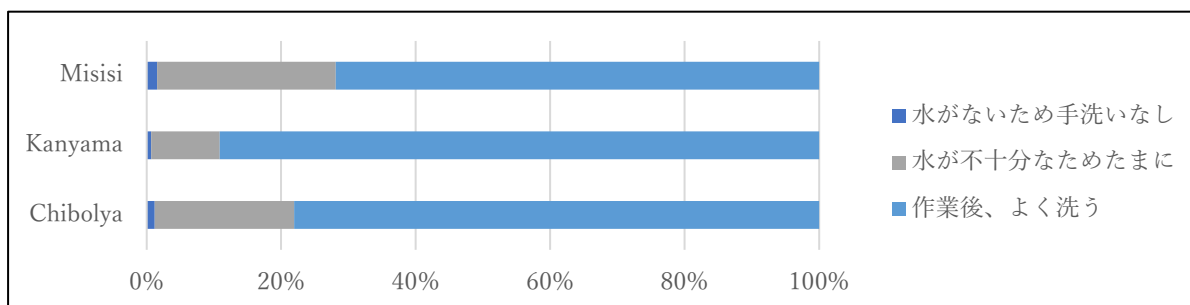


図 67 世帯：Q40 手洗いの頻度

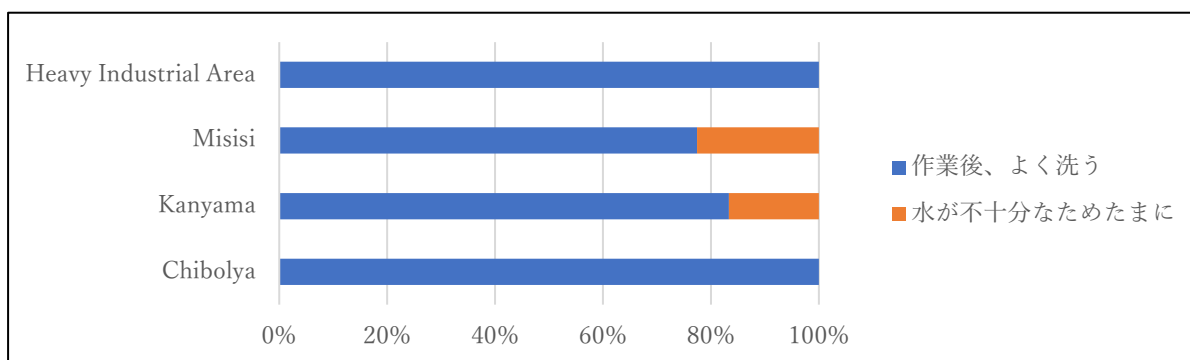


図 68 事業所：Q34 日常の手洗いの方法

10. 感染症・公害

5年以内に経験した病気は、「マラリア」が多い。

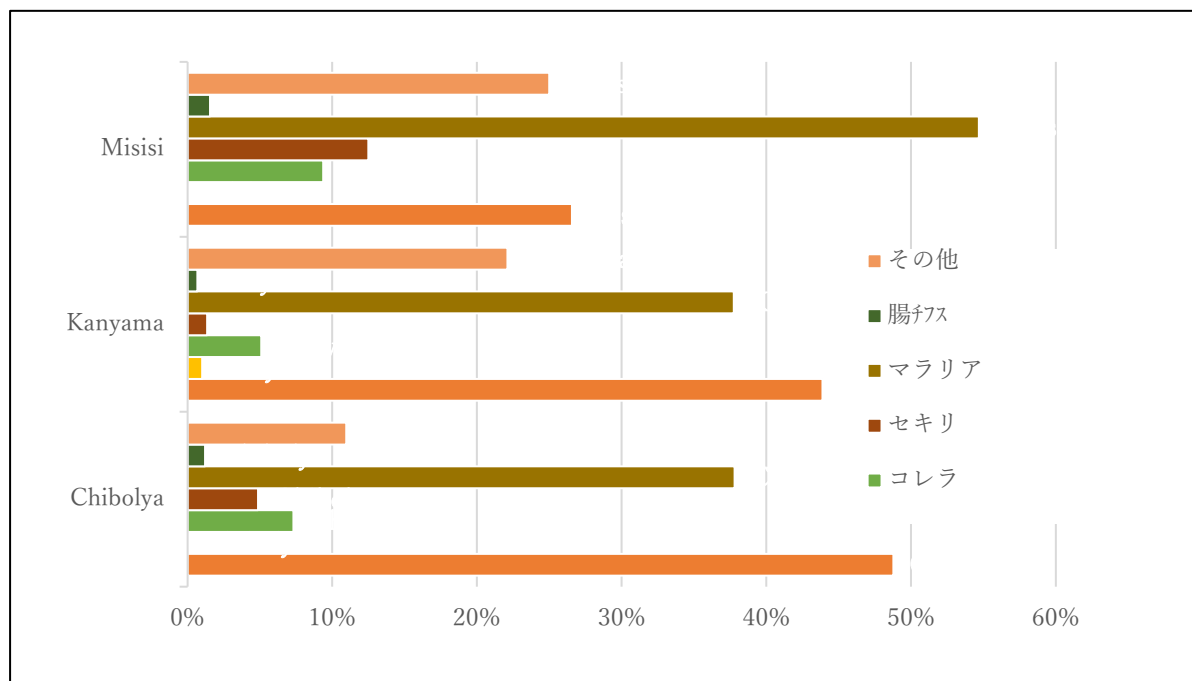


図 69 世帯 : Q41 5年以内に家族が経験した病気（複数回答）

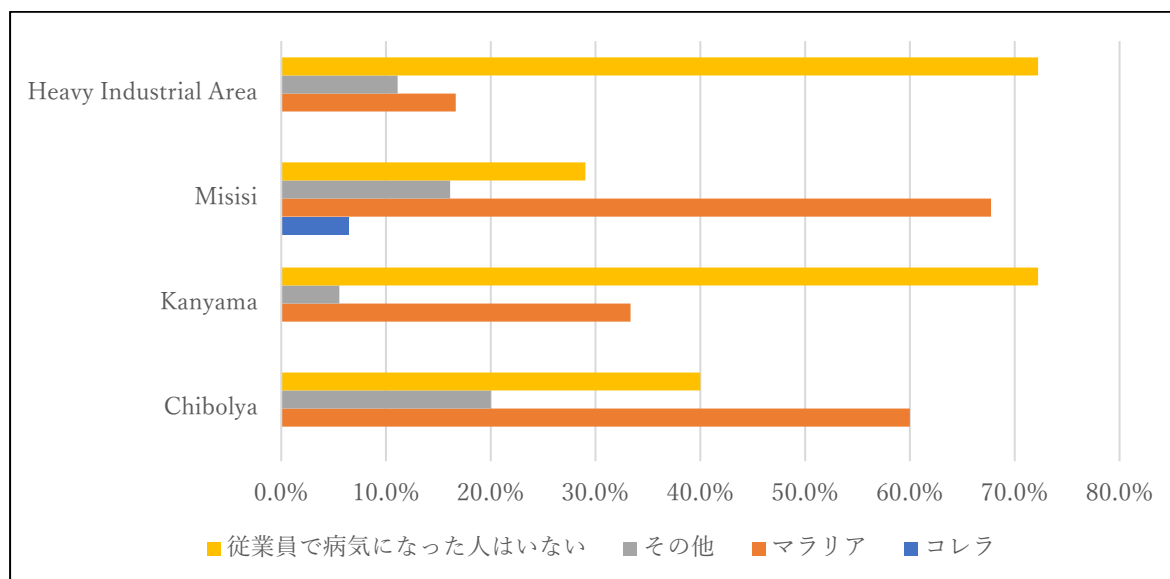


図 70 事業所 : Q35 5年以内に従業員が経験した病気（複数回答）

病気の原因は「不明」が多いが、「氾濫・洪水からの不十分な排水システム」と回答している人が多くいることから、疫病の原因や蚊の発生のようなリスクへの意識があることが推測できる。

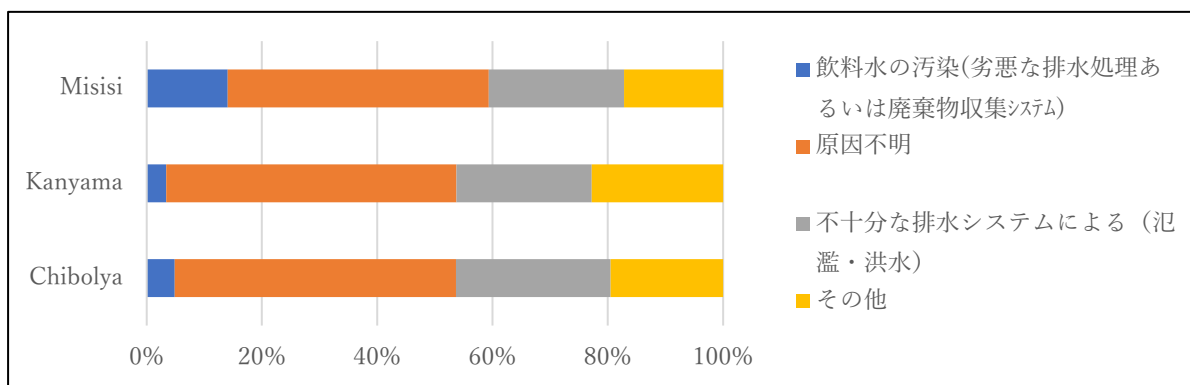


図 71 世帯 : Q42 家族が病気になった主要原因

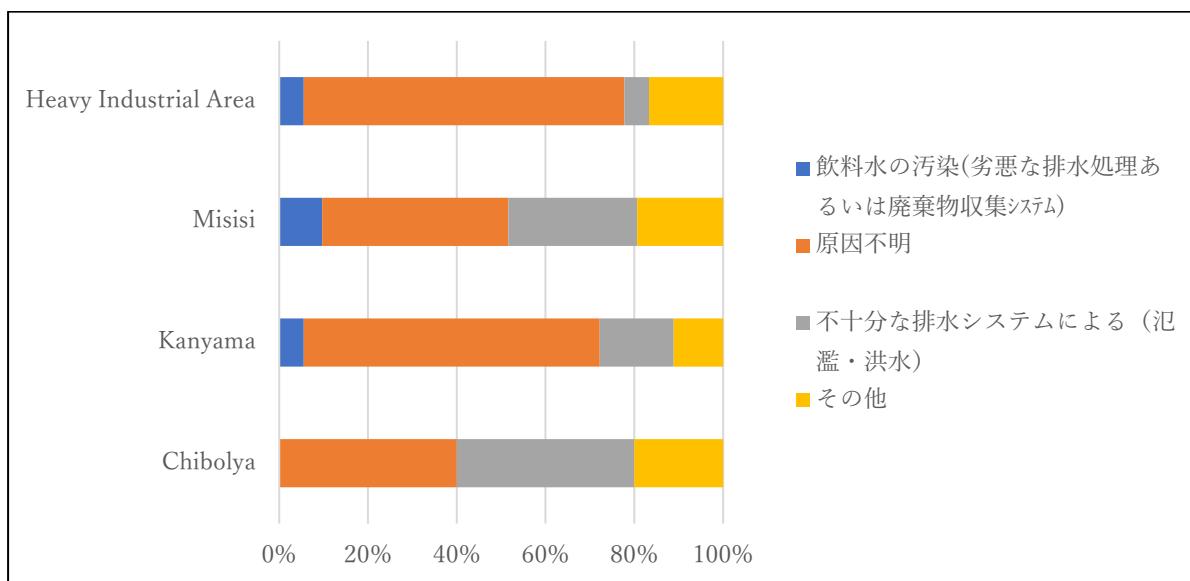


図 72 事業所 : Q36 従業員が事業所内で経験した疫病

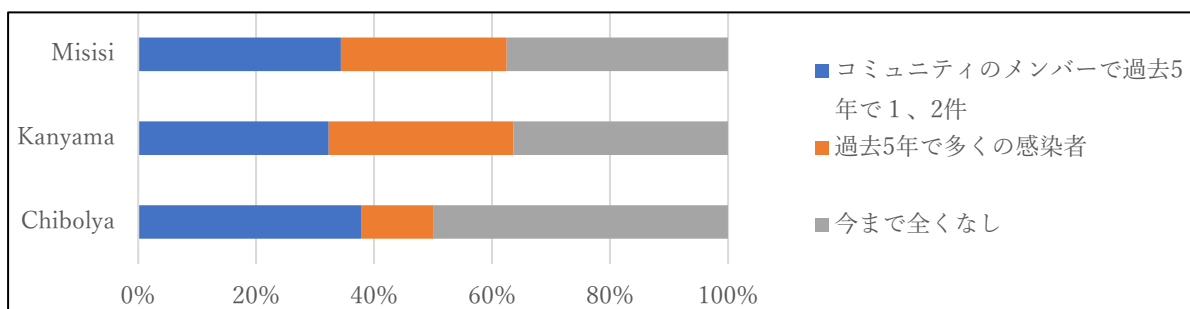


図 73 世帯 : Q43 過去 5 年間に聞いたコミュニティ（タウンシップ）での伝染病

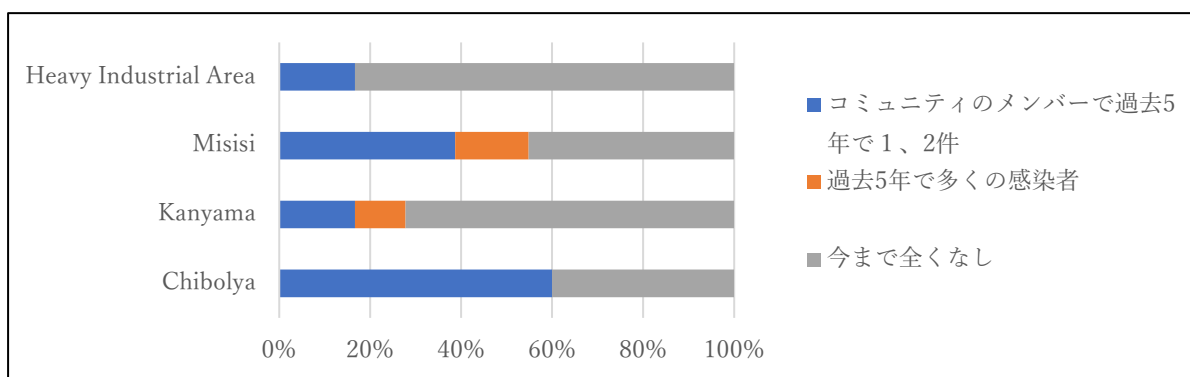


図 74 事業所：Q37 過去5年間に聞いた産業エリアもしくはタウンシップでの伝染病

11. 衛生改善の必要性と要請

衛生改善の意識はある程度高いと考えられる。「マスク・手洗い」や「政府の指導に遵守」で8割程度を占めている。しかしながら、なにもしていない人も1割から2割程度いることも事実である。

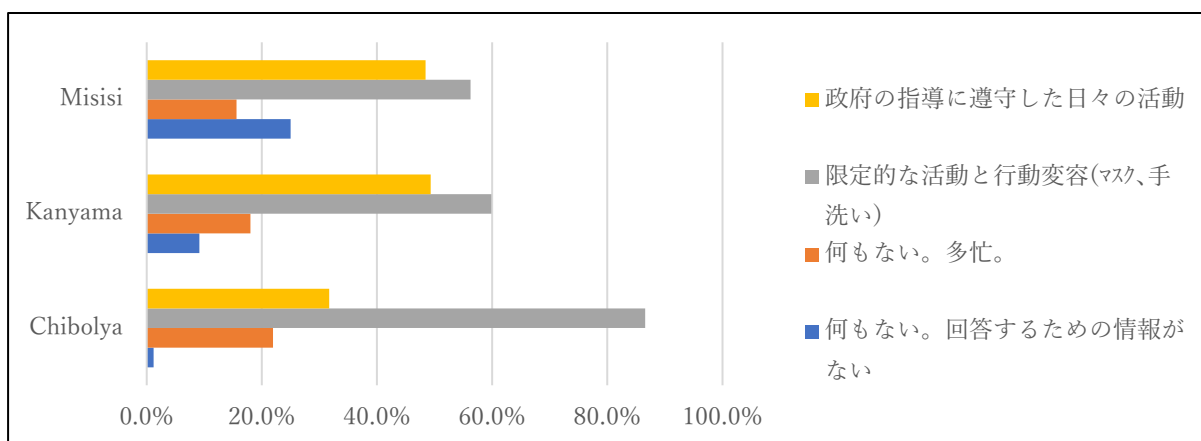


図 75 世帯：Q44 家で自分でできる衛生改善活動（複数回答）

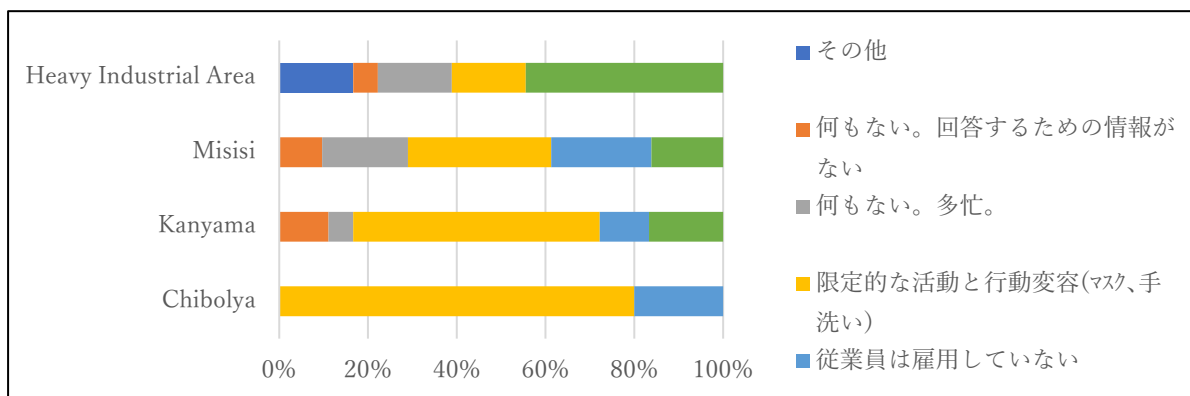


図 76 事業所：Q38 事業所内の従業員でできる衛生改善活動

コミュニティ・事業所での衛生改善では、「洪水・氾濫からの排水」や「ゴミ収集」を求める声が多い。

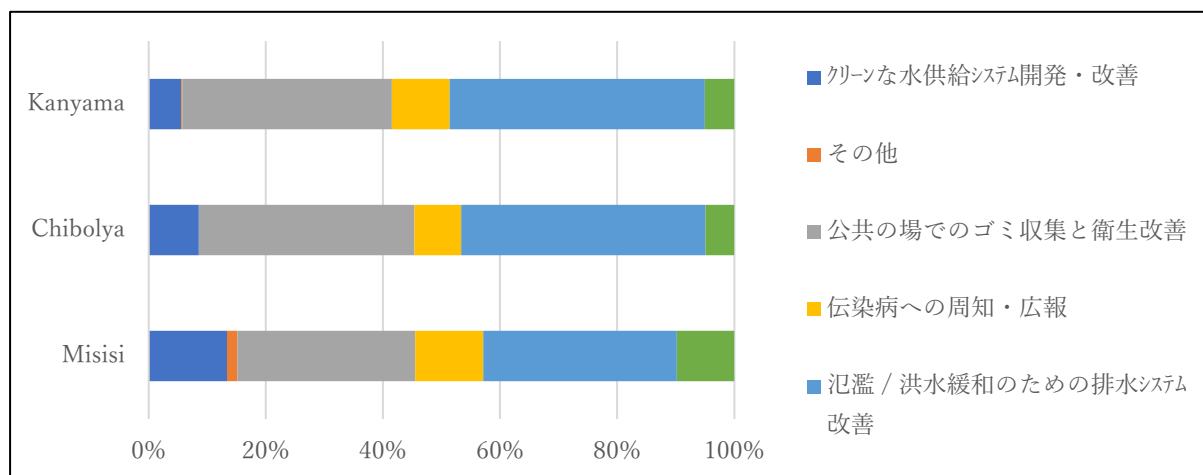


図 77 世帯 : Q45 コミュニティでの公衆衛生改善の優先要請

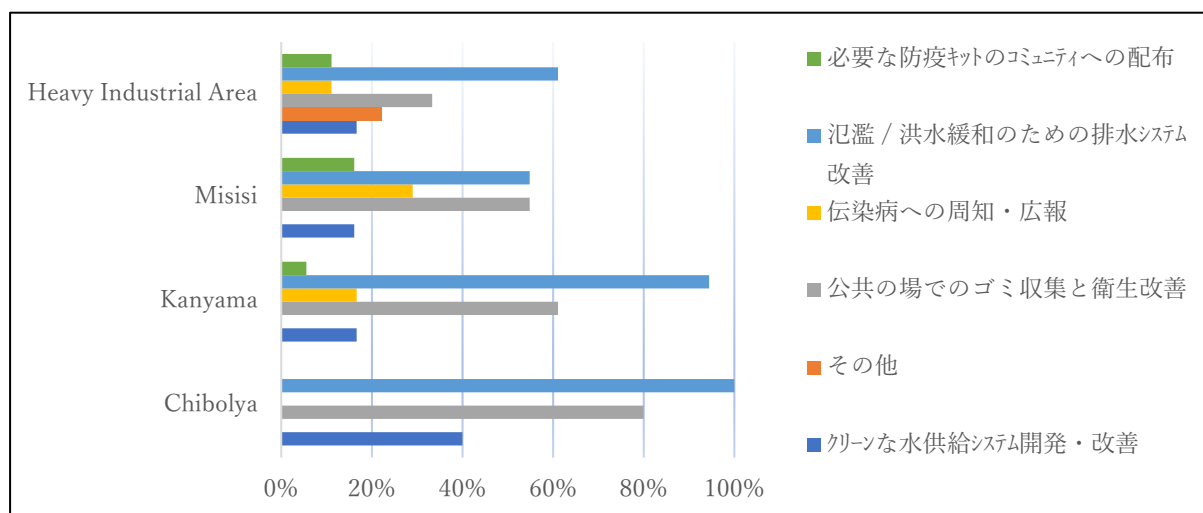


図 78 事業所 : Q39 事業所内で公衆衛生改善の優先要請（複数回答）

FORM 4 COVID 19 の影響と対策

12. COVID 19 の知識認識

COVID19 に関する知識は低い。「COVID19 のリスクと必要な対策を知っている」と回答した人は 3 割程度である。Misisi では「知らない」と答えた人が 1 割程度いた。事業者においても同様であるが、Kanyama で認知度が高いので、何らかの周知活動がこの地域で行われたことが推測できる。

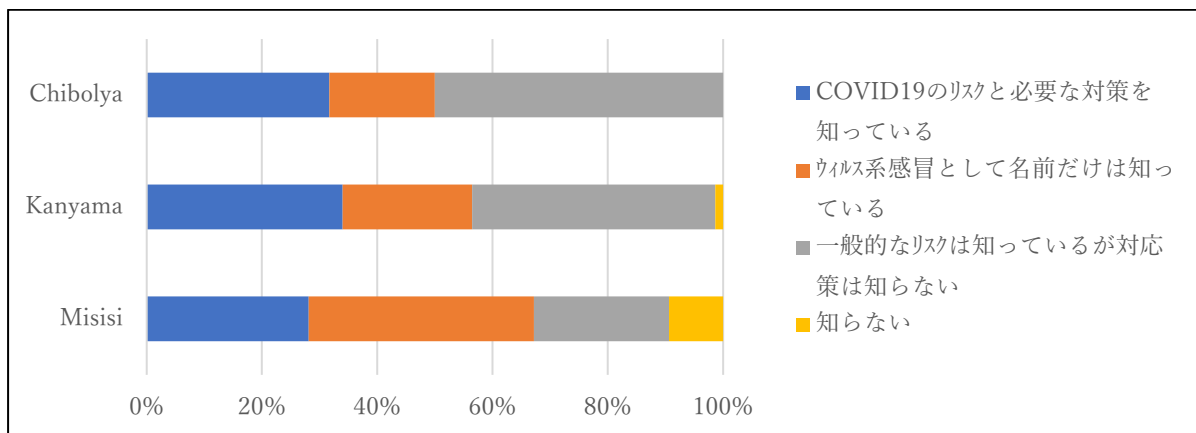


図 79 世帯 : Q46 COVID 19 の認知度

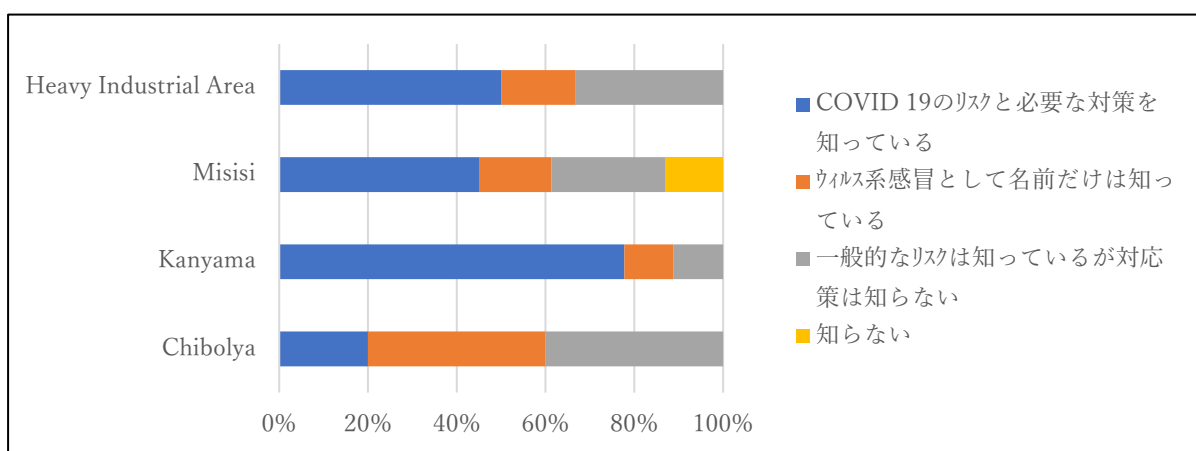


図 80 事業所 : Q40 COVID 19 の認知度

COVID19 関しての周知はメディアが多い。コミュニティ活動もある程度があるが、政府の周知活動の割合が少ないことが特徴的である。

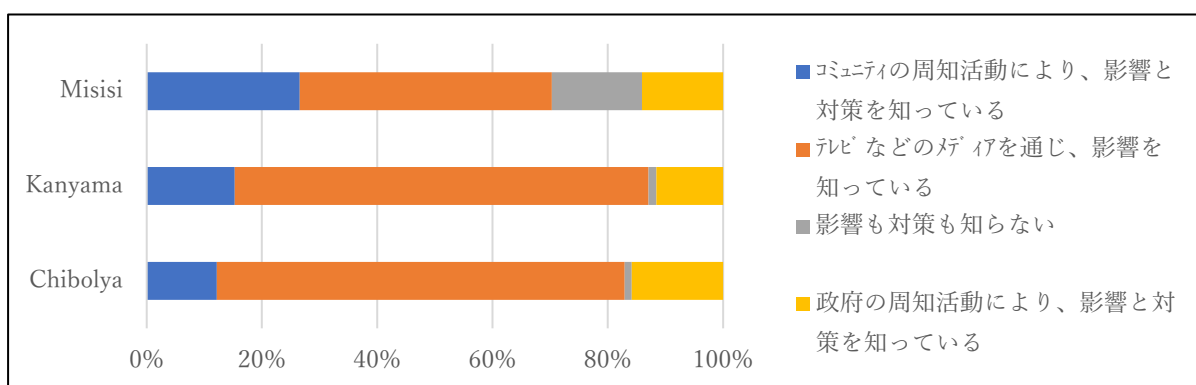


図 81 世帯 : Q47 COVID 19 の影響と対策に対する理解

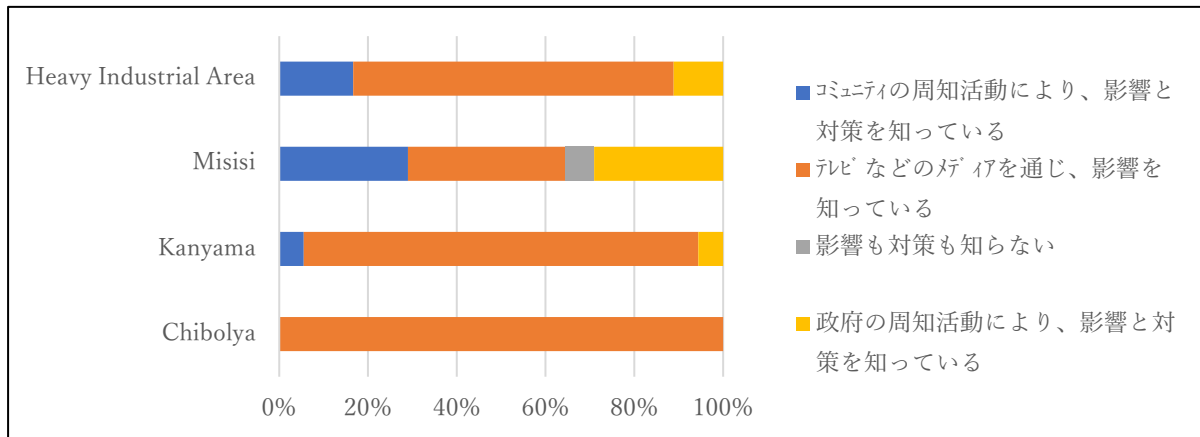


図 82 事業所：Q41 COVID 19 の影響と対策に対する理解

13. COVID 19 の生活への悪影響

「全ての仕事・ビジネスを失った」と「貯金のほとんどがなくなった」と回答した人を合わせると、4 割か 5 割に上る。経済的な影響は深刻である。事業者も同様の傾向を示している。

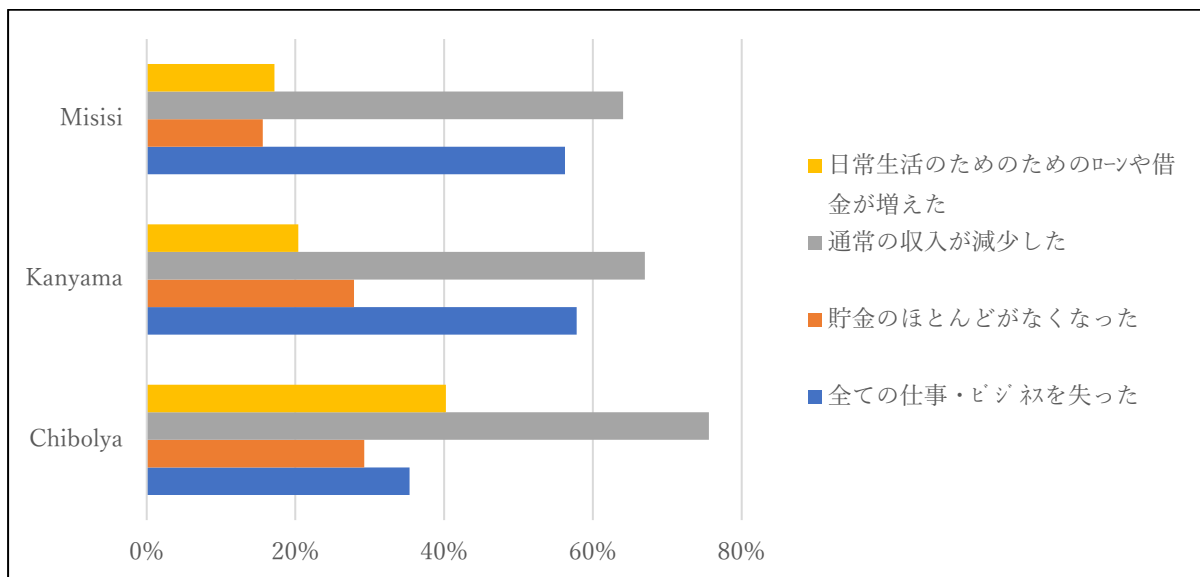


図 83 世帯：Q48 金銭面への最大の悪影響（複数回答）

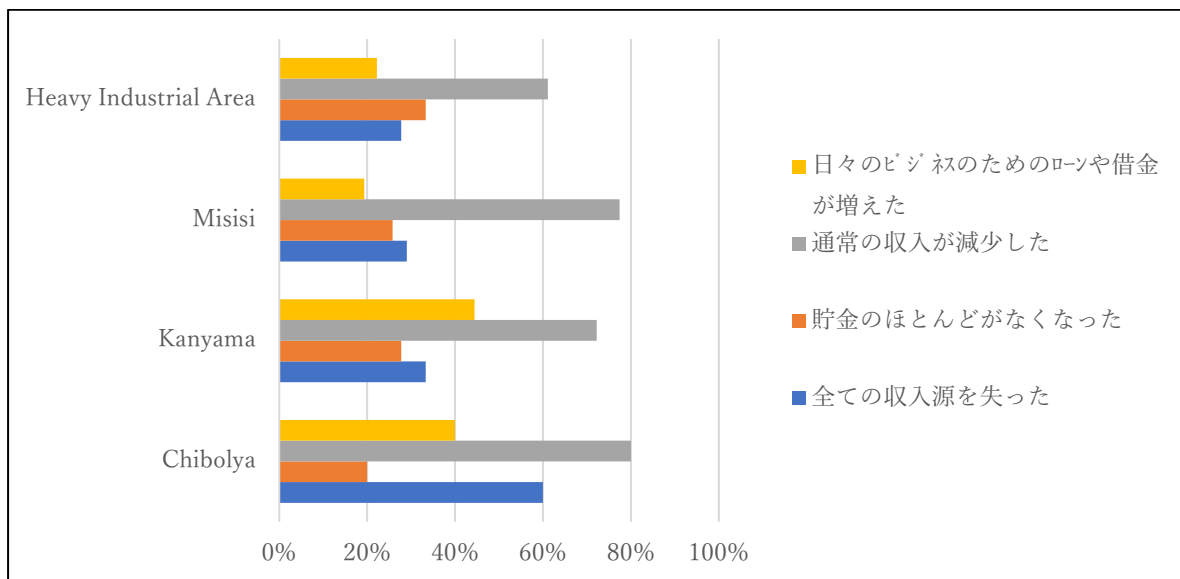


図 84 事業所：Q42 事業所の収益面での最大の悪影響（複数回答）

「日常生活への影響」に関して、「ステイホーム」が増え、公共空間を避けるということは予測できる。さらに「収入源で食料が減った」と回答している人が3割から4割いる。深刻な状況がうかがえる。

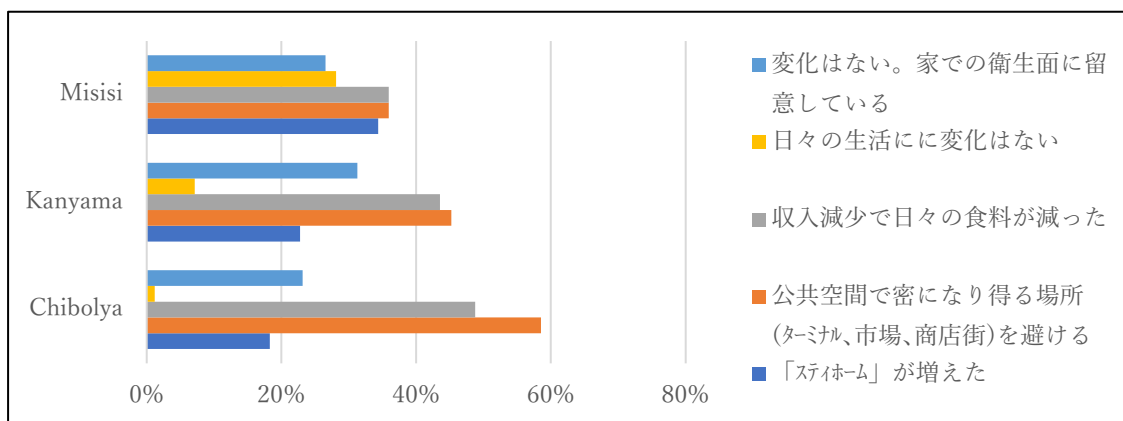


図 85 世帯：Q49 COVID 19 の日常生活への主な影響（複数回答）

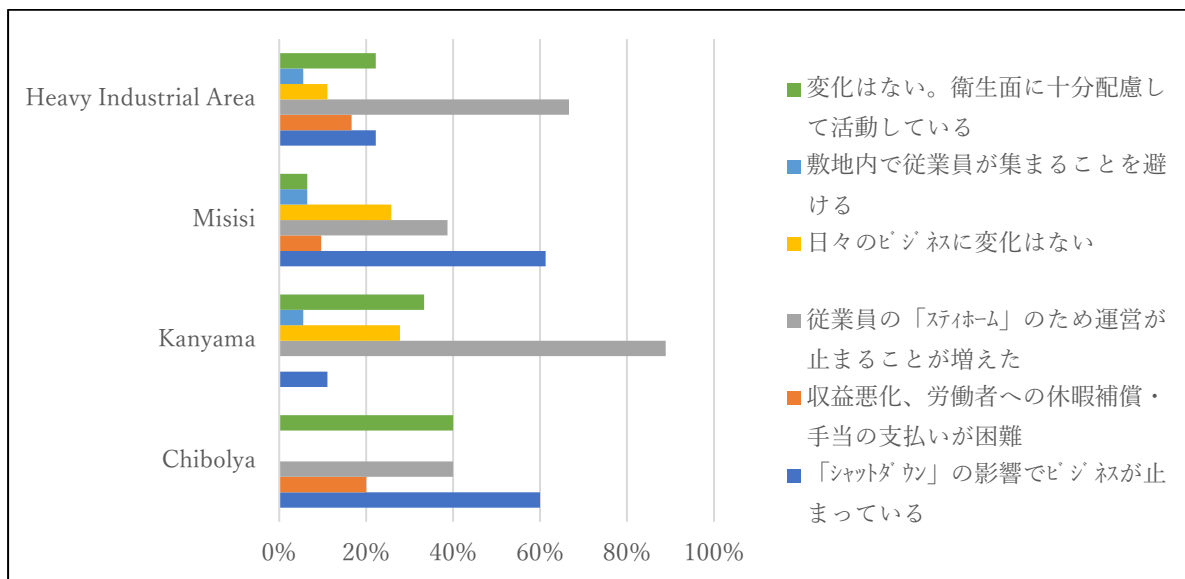


図 86 事業所：Q43 COVID 19 の日常の事業所活動への主な影響（複数回答）

健康管理への影響では、「医療サービスへのアクセスがない」や「医療サービスへのアクセスが困難」と回答するひとが多く、この分野の脆弱性がうかがえる。

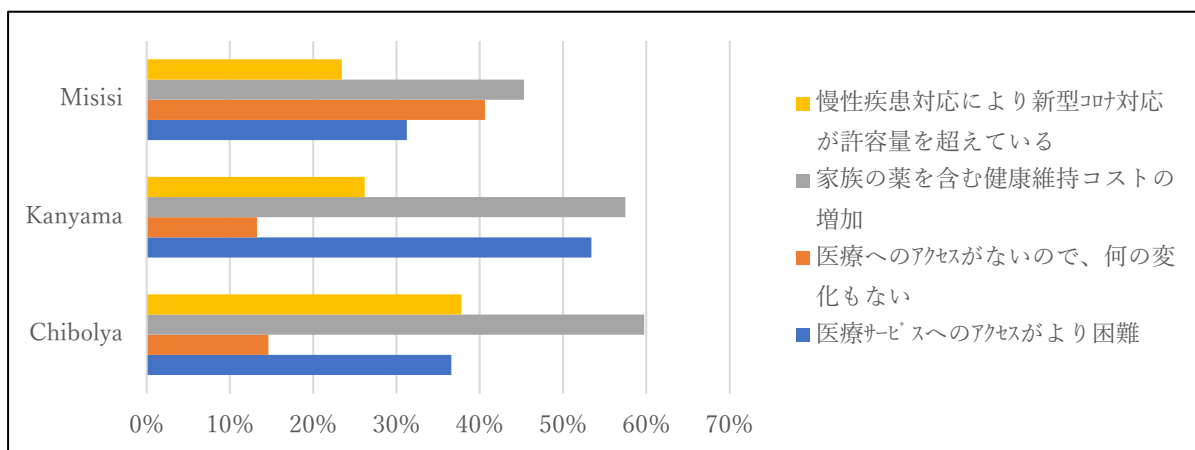


図 87 世帯：Q50 健康管理に対する悪影響（複数回答）

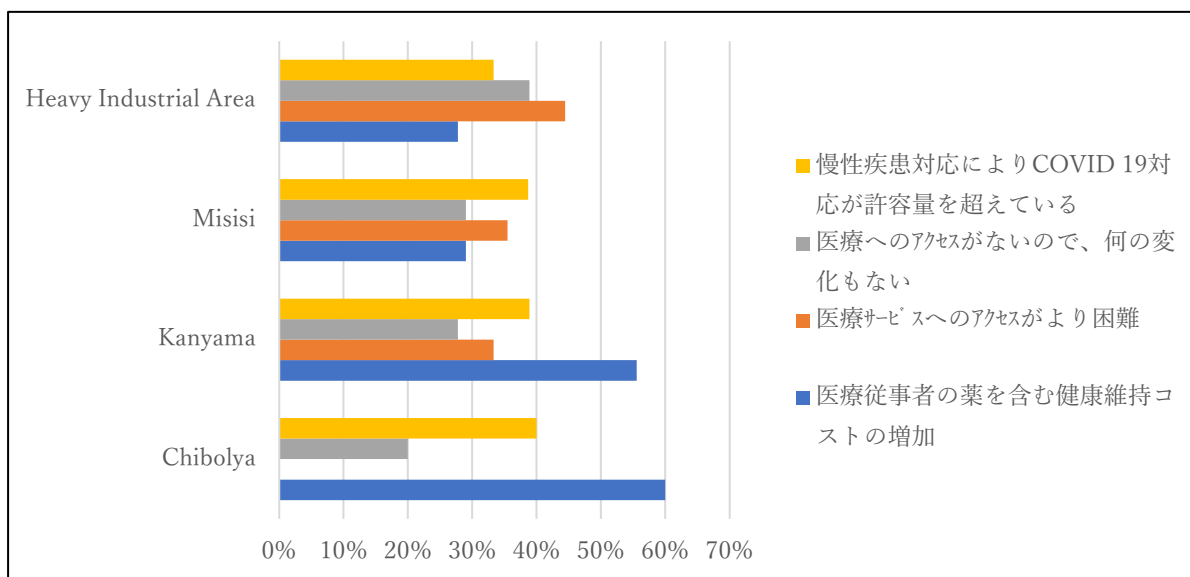


図 88 事業所：Q44 健康管理に対する悪影響（複数回答）

14. COVID 19 感染防止のために行っている対策

一般に考えられる COVID 19 感染防止策は行っているようである。手洗いやマスク使用は定着しているようだ。

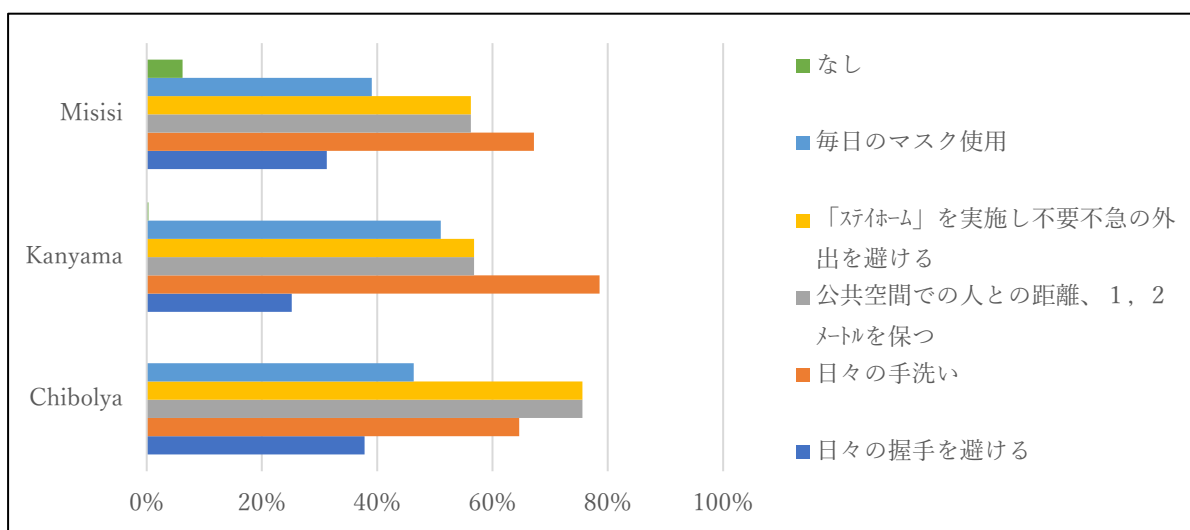


図 89 世帯：Q51 COVID 19 に対する日々の対策（複数回答）

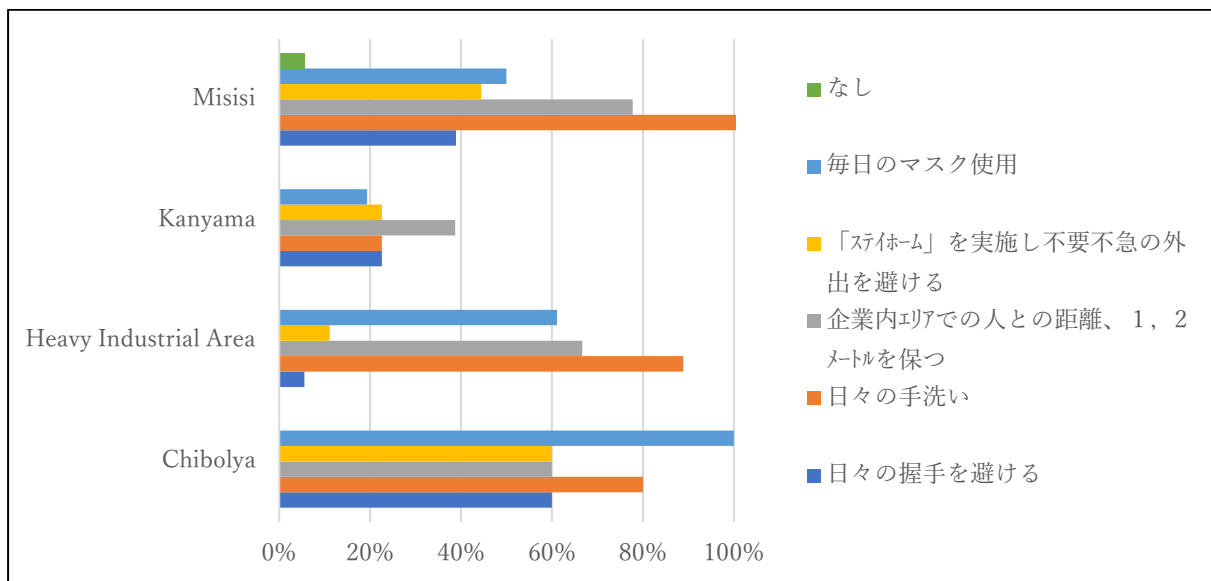


図 90 事業所：Q45 COVID 19 に対する日々の対策（複数回答）

「対策が困難な理由」は、金銭面の理由が大半を占める。マスク等を購入できないという状況が想像できる。

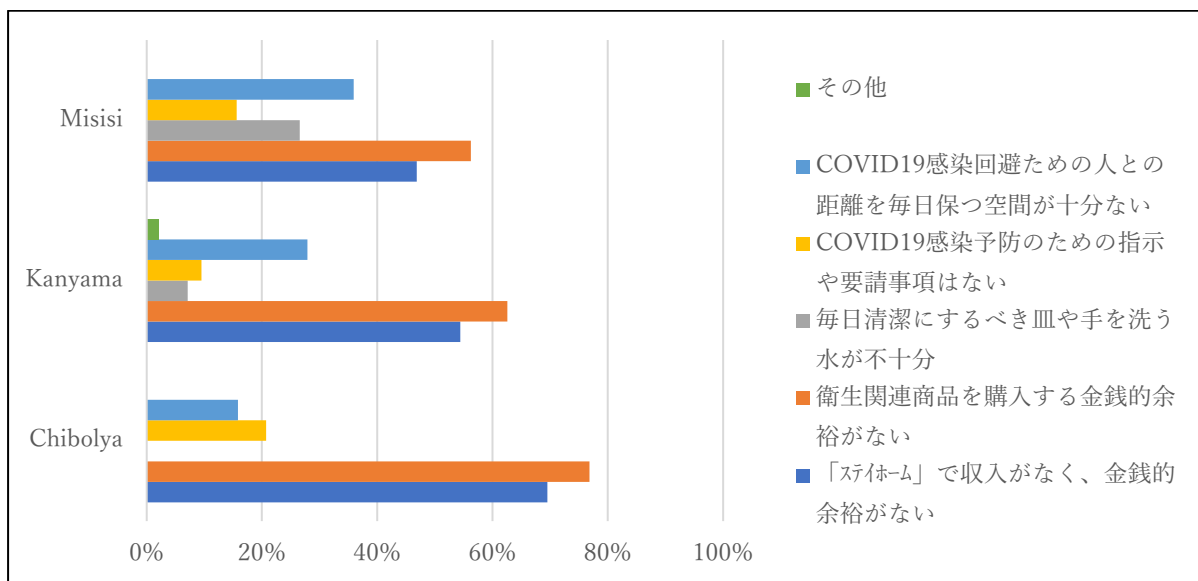


図 91 世帯：Q52 対策ができない理由（複数回答）

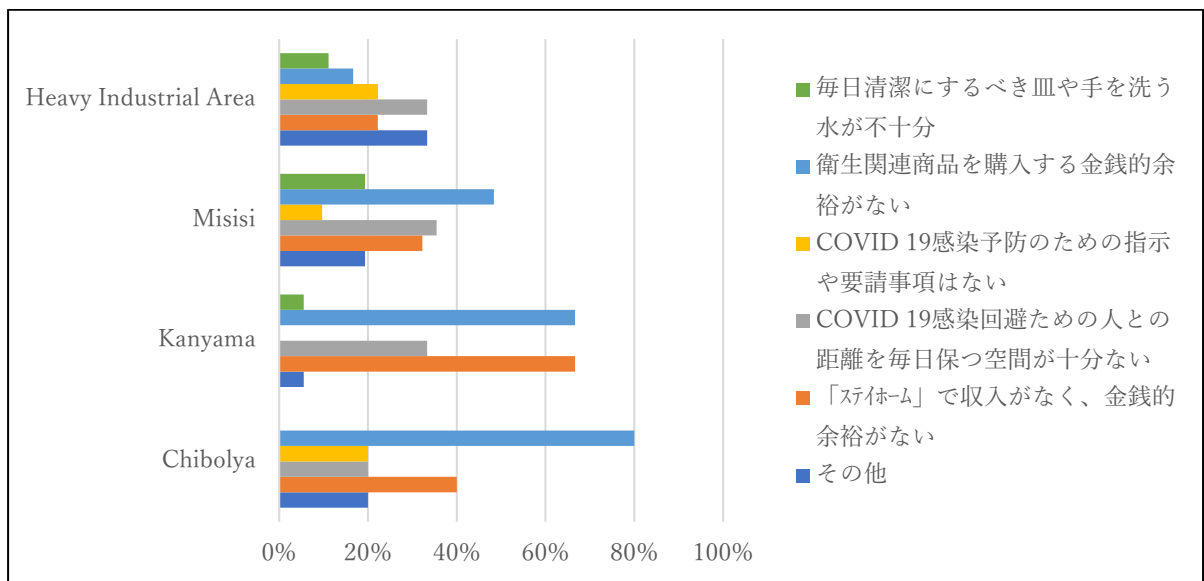


図 92 事業所：Q46 対策ができない理由（複数回答）

「COVID 19 に対するコミュニティの対応・活動」では、「密を避ける」ということがていやくしているのであろう。「宗教的集まりを含む集会を避ける」や「公共空間へ出向かない」などが大半を占めている。特に、Chibolya でその傾向が強い。

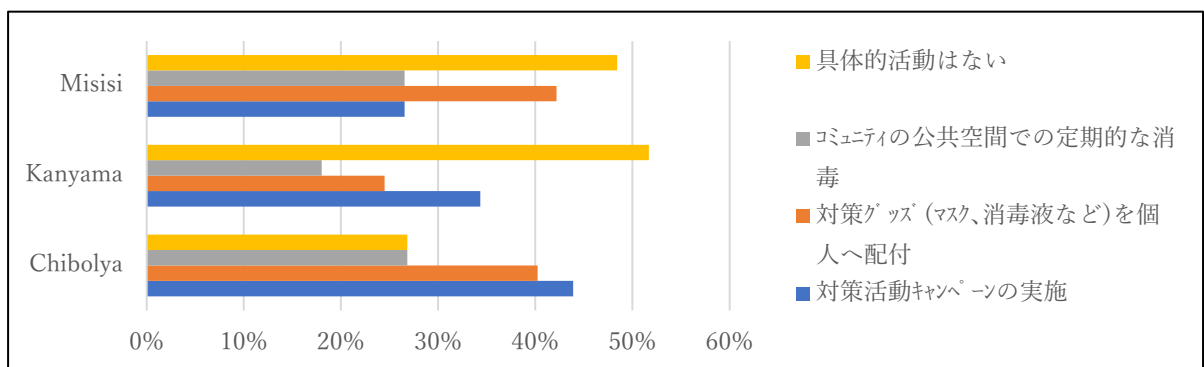


図 93 世帯：Q53 COVID 19 に対するコミュニティの対応・活動（複数回答）

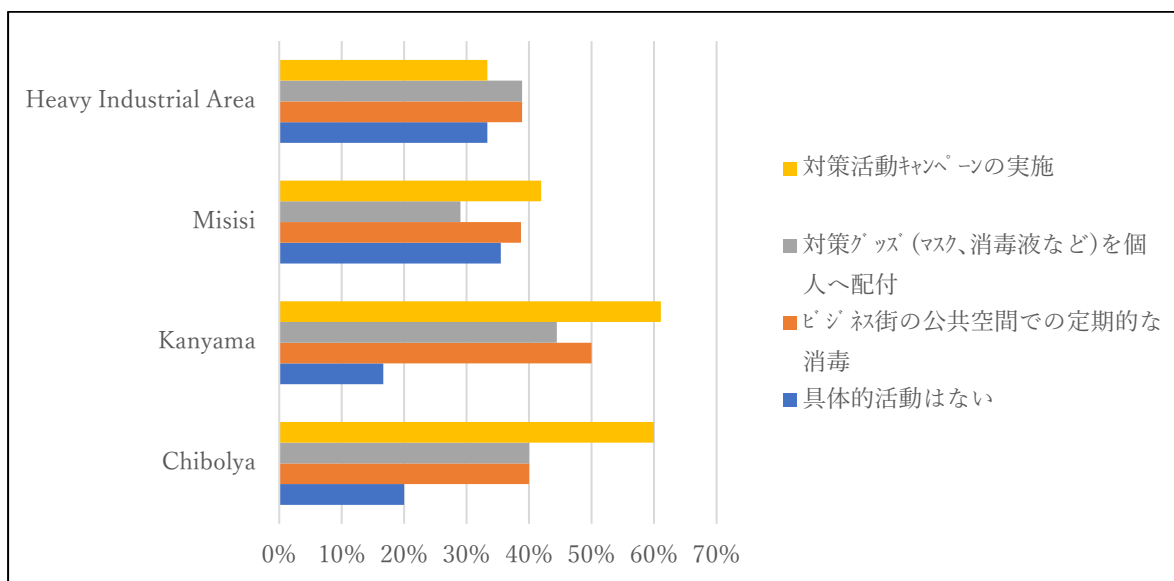


図 94 事業所：Q47 COVID 19 に対するコミュニティの対応・活動（複数回答）

15. 政府や事業所が実施できる更なる対策

「更なる対策」では現行の「密を避ける」対策が大半を占める。Chibolya の事業者は「感染対策へのイベントの参加」の割合が多いのが特徴的である。

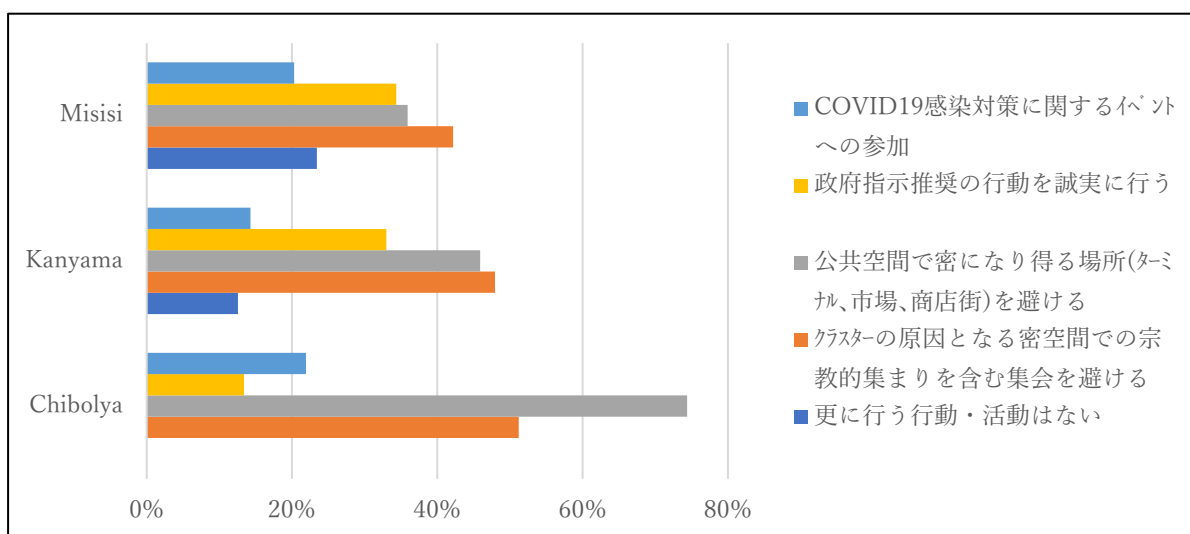


図 95 世帯：Q54 COVID 19 に対する個人での更なる対策・活動（複数回答）

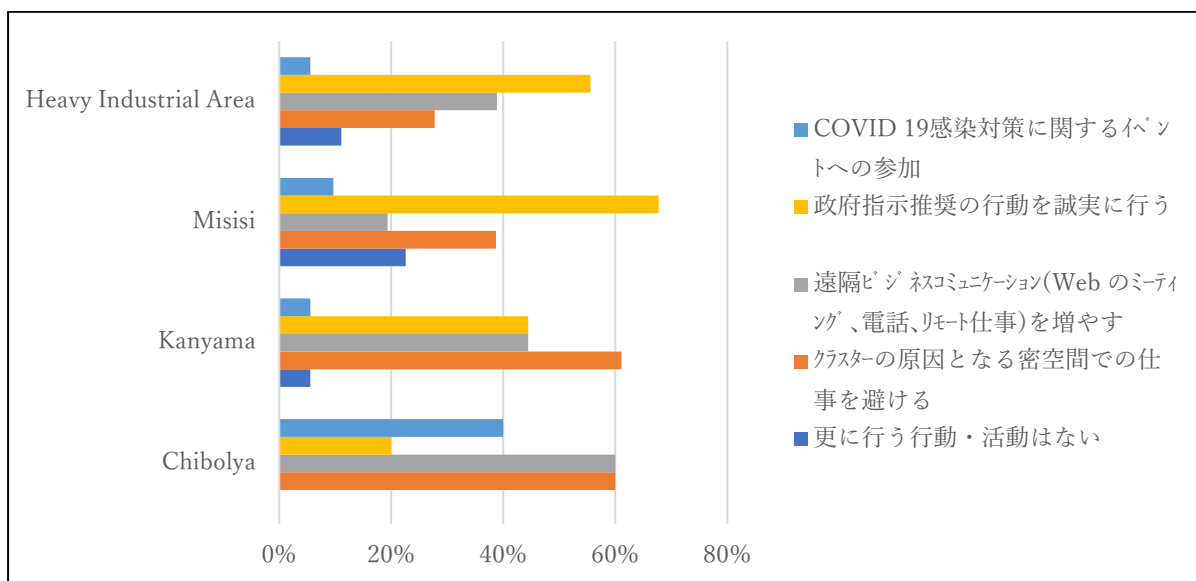


図 96 事業所：Q48 COVID 19 に対する事業所での更なる対策・活動（複数回答）

「政府がすべき更なる支援活動」では住民は資金面の支援を要望している。また感染防止のためのマスク等のグッズ配布への要望も多い。

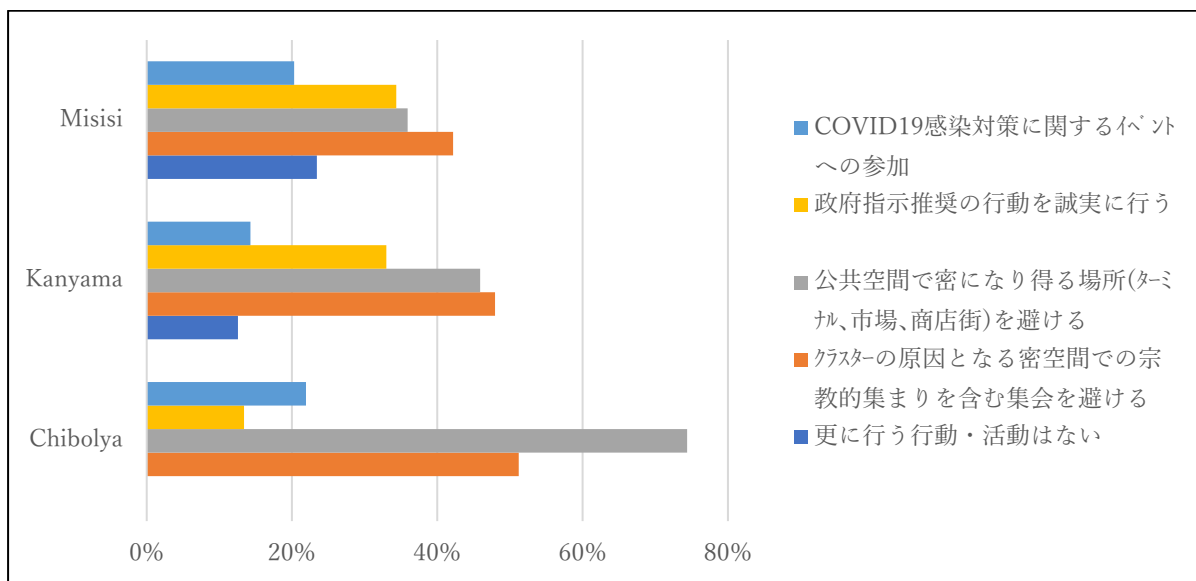


図 97 世帯：Q55 政府がすべき更なる支援活動（複数回答）

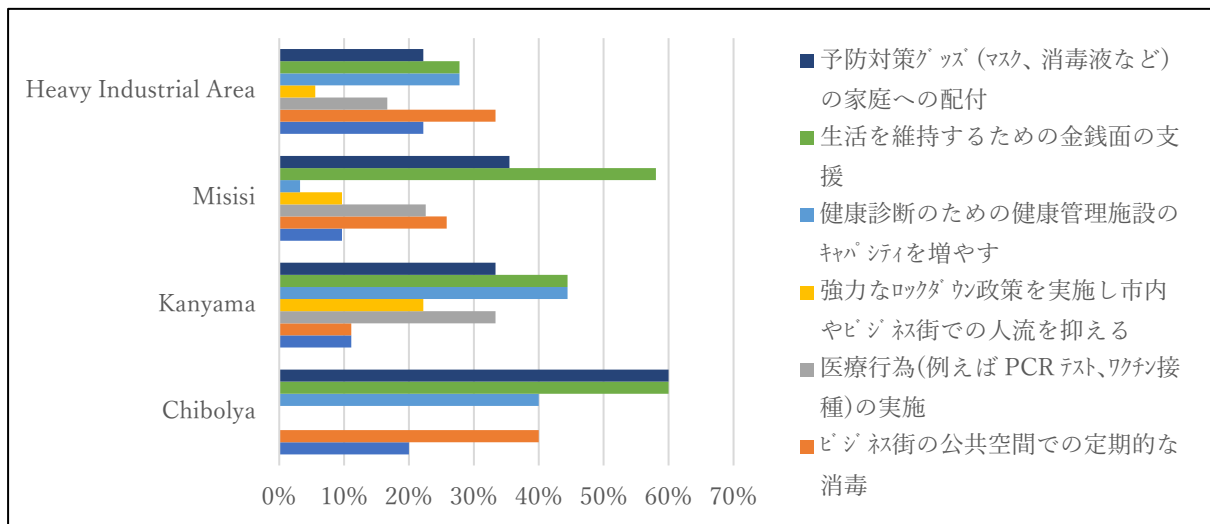


図 98 事業所：Q49 政府がすべき更なる支援活動（複数回答）

16. コンパウンド・タウンシップでの生活環境改善のための優先度

コンパウンドでの生活環境改善では、「氾濫・洪水回避のための排水設備改良」への要望が4割を占めている。

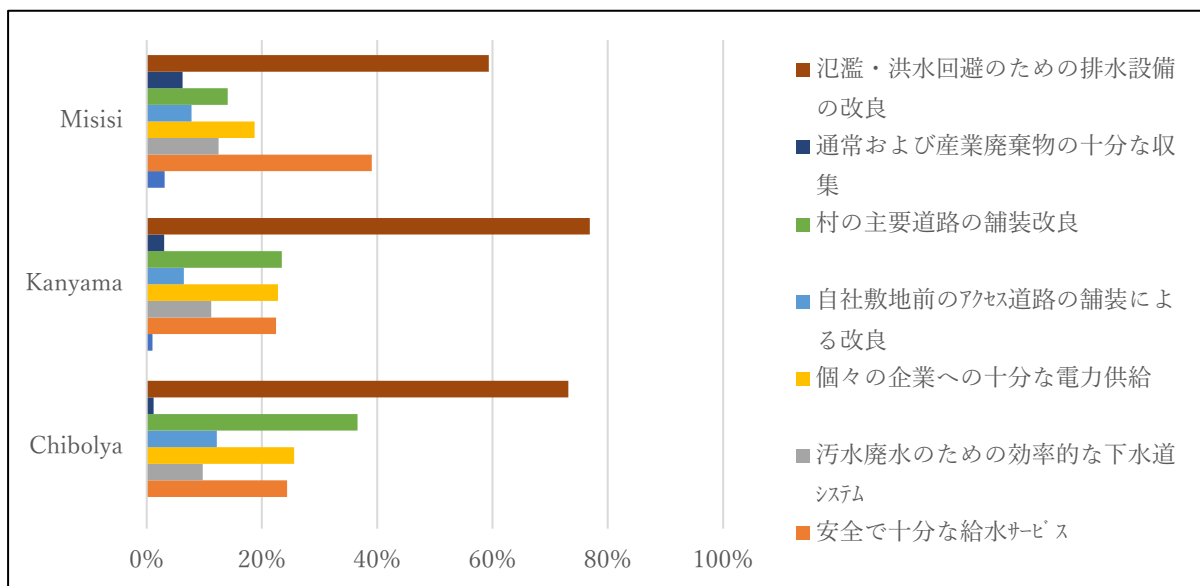


図 99 世帯：Q56 近隣（未計画所住区）での生活環境改善の重要事項（複数回答）

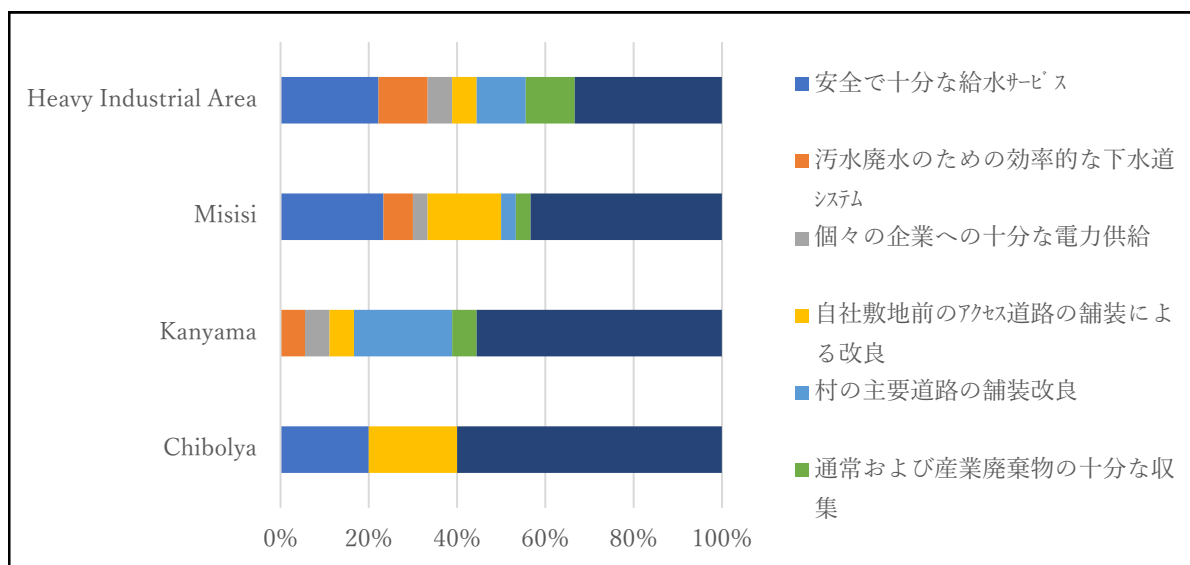


図 100 事業所：Q50 近隣（タウンシップ）での生活環境改善の重要事項

住民の給水に対しての要望は、「水供給のための独自の新規掘削」が大半を占める。Chibolyaの事業者で「その他」が多いが、内容は不明である。

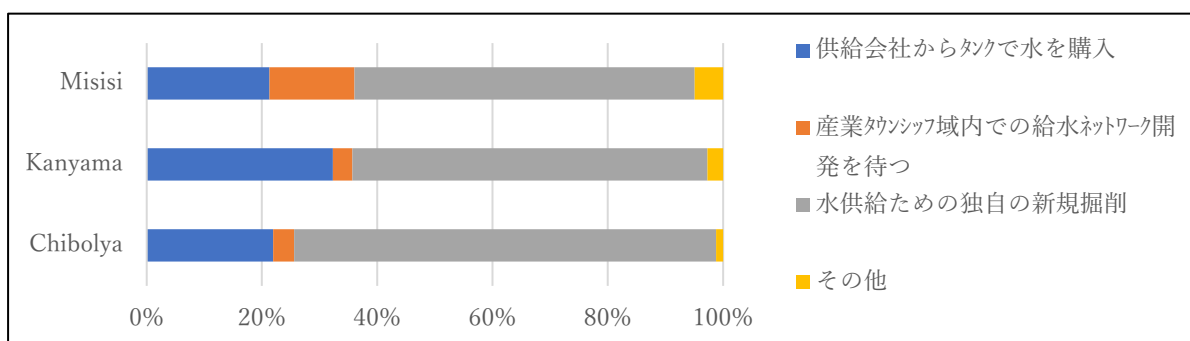


図 101 世帯：Q57 個々の家への給水が難しい場合の第二の選択肢

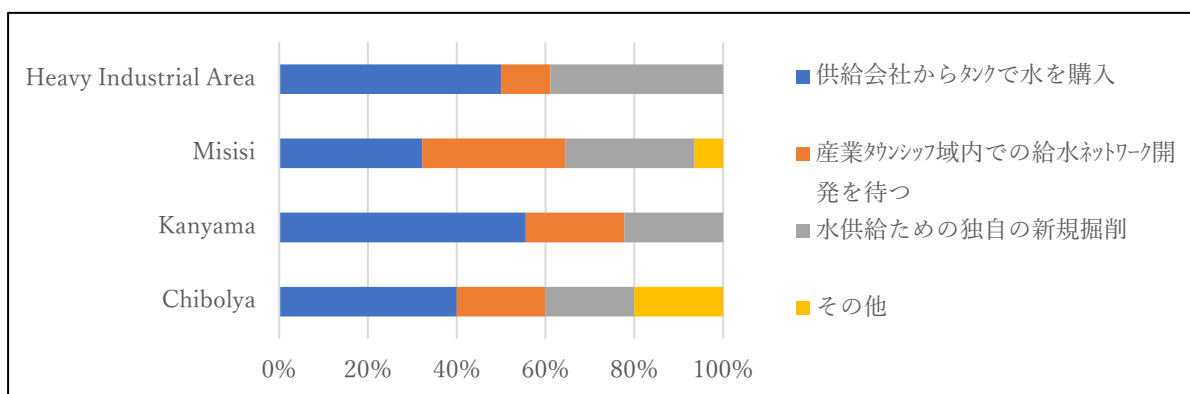


図 102 事業所：Q51 個々の事業所施設への給水が難しい場合の第二の選択肢

「トイレがない家に設置ができない場合」は「隣人と共同で」が多い。「自己資金を貯める」が、「少し離れていても、きれいな水洗トイレ」を上回っている。

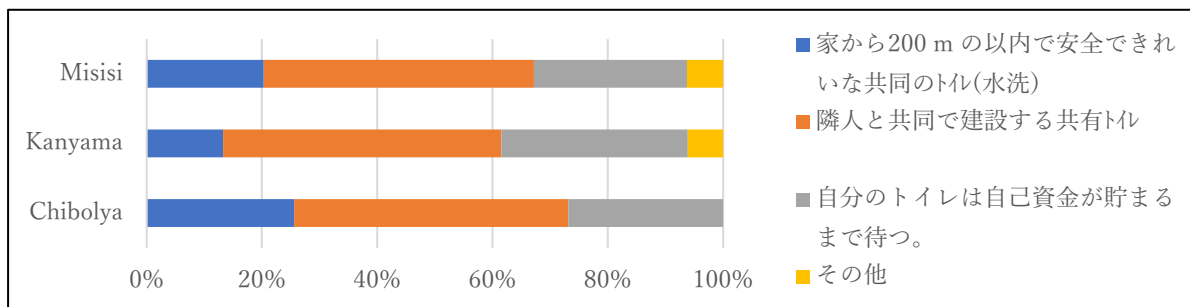


図 103 世帯 : Q58 トイレがない家に設置ができない場合の第二の選択肢

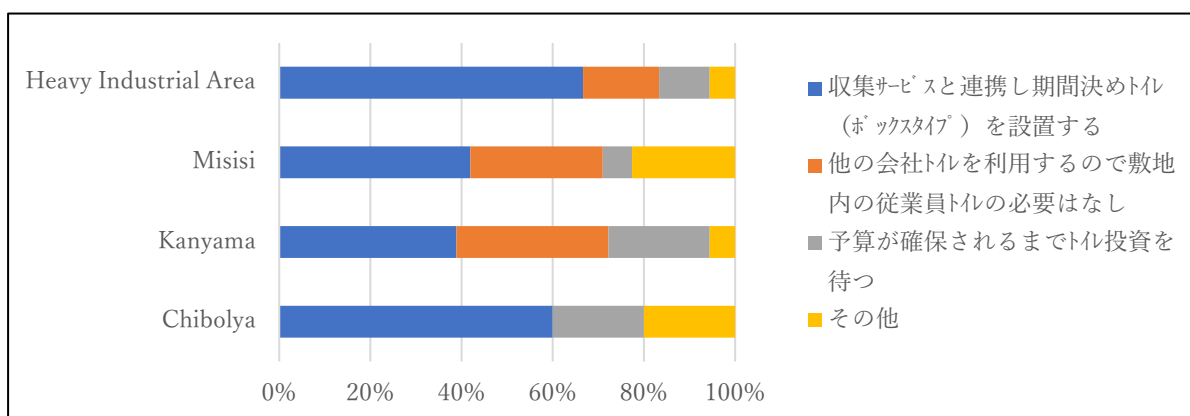


図 104 事業所 : Q52 トイレが施設内に設置ができない場合の第二の選択肢

「込み収集が不十分な場合」の選択肢としては、「近所にゴミ捨て場」を望む声が多い。

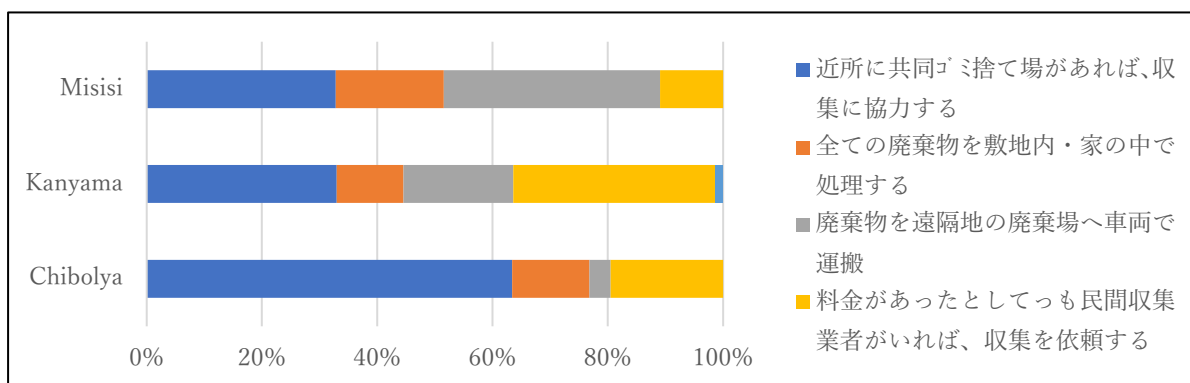


図 105 世帯 : Q59 ゴミ収集が不十分な場合の第二の選択肢

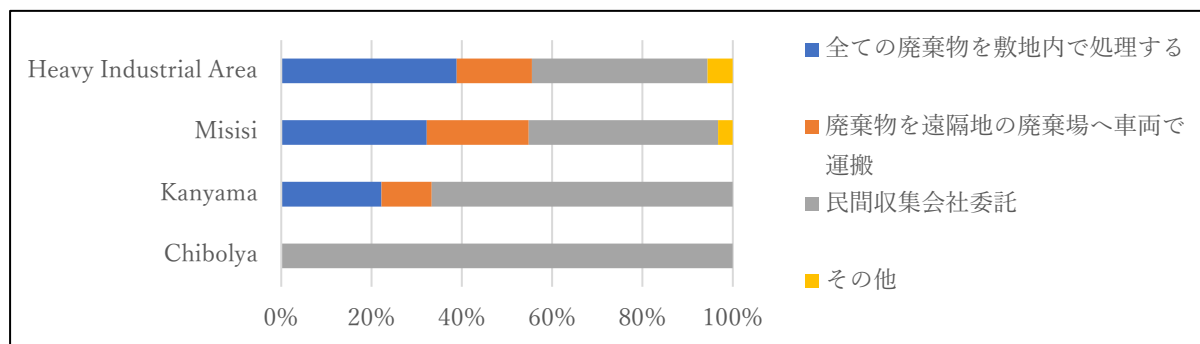


図 106 事業所：Q53 ゴミ収集が不十分な場合の第二の選択肢

「移転を伴う道路改善」に関しては「補償があれば」という回答が4割ほどある。しかし、Chibolyaでは「移転しない」と回答した人が半数に上る。

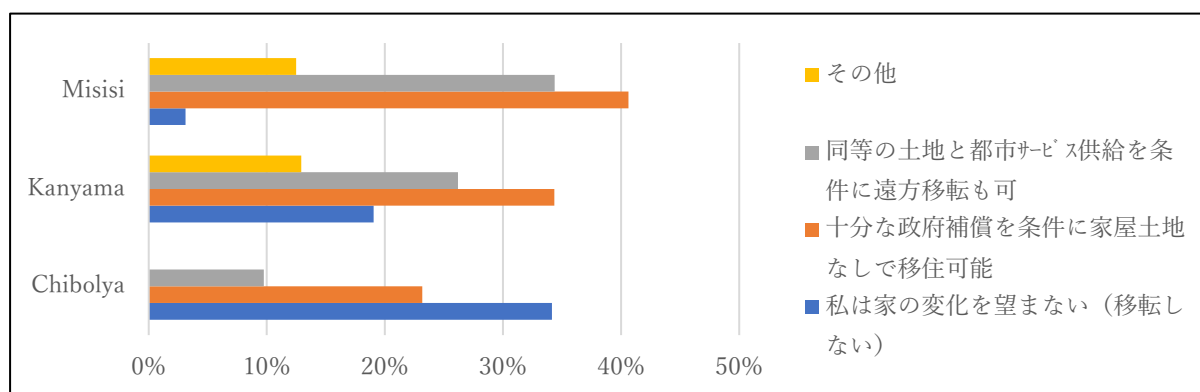


図 107 世帯：Q60 道路改善が自宅の移転を伴う場合の政府の対応への合意条件（複数選択）

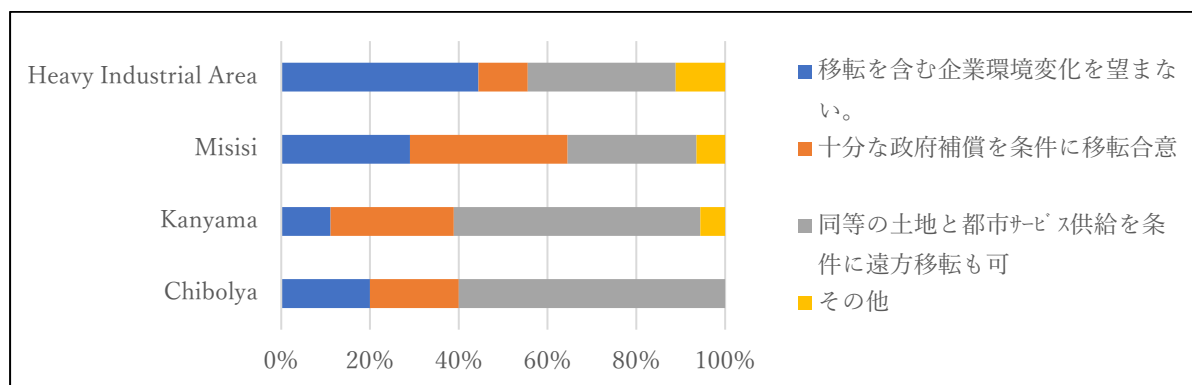


図 108 事業所：Q54 道路改善が自宅の移転を伴う場合の政府の対応への合意条件

「不動産所有を確実にする方策」では、多少時間がかかっても「現在のところに住み続けた」という要望が強いようである。2割以上の人々が電気ガス水道のサービスのために敷地が狭くなくてもいいと考えている。

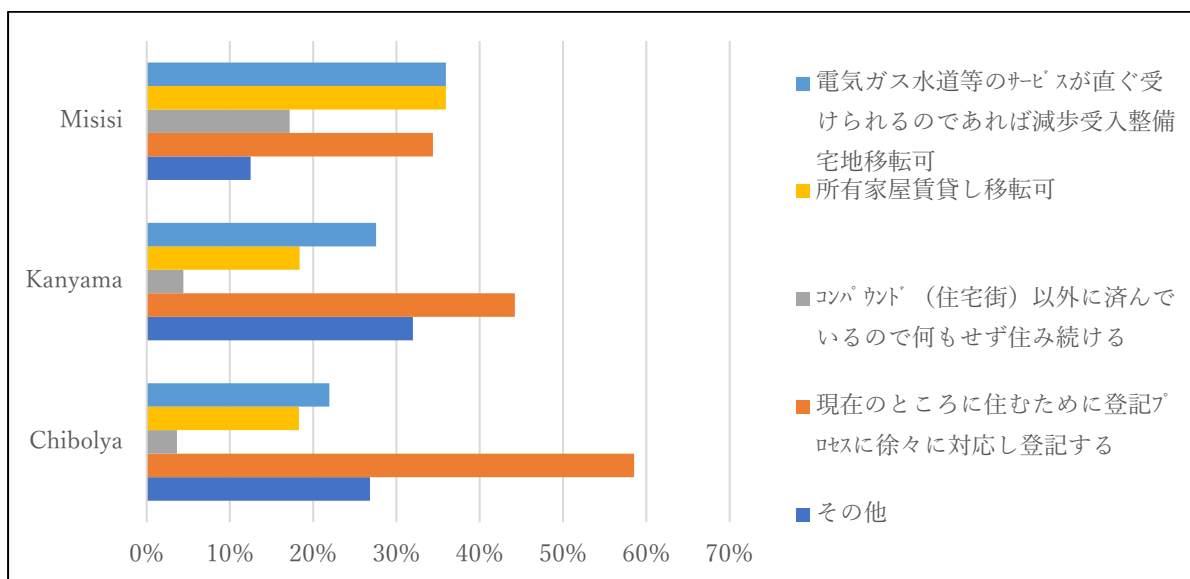


図 109 世帯 : Q61 不動産所有を確実にする方策 (複数回答)

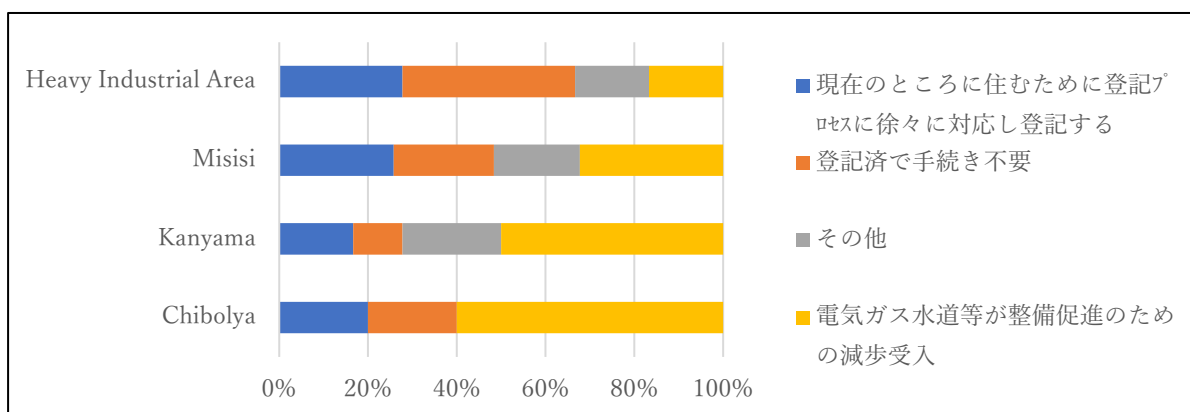
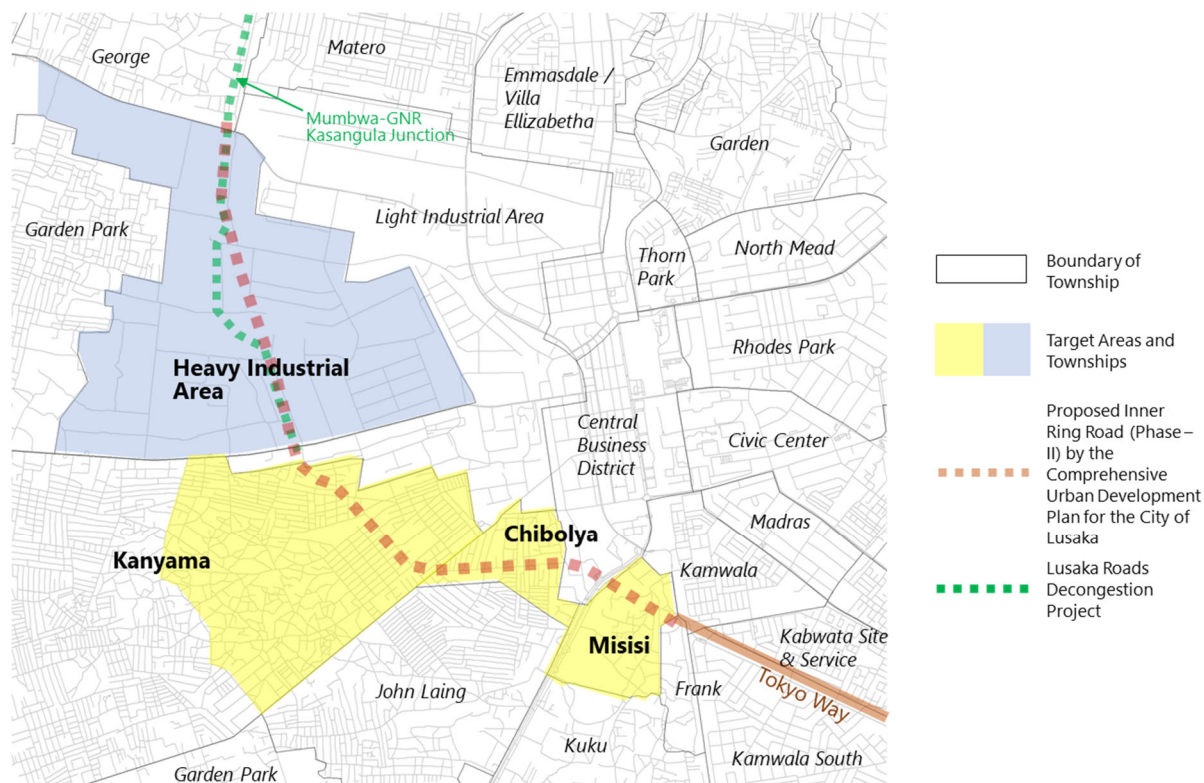


図 110 事業所 : Q55 事業所等の土地所有を正常化するためにどのような改善方策をとるべきか

A1-対象地区とサンプル

(1) 対象地区

調査対象地区は、本調査で想定している内環状道路の延伸ルート上に位置する4つのコンパウンド地区を対象とし、住居系が3コンパウンド地区（Kanyama, Chibolya, Misisi）と産業系の1地区（Heavy Industrial Area）から構成される。具体の環状ルートおよび4つのコンパウンド地区の位置を以下の図に示す。尚、Kanyama 地区は、Township の区域が大きいため、調査範囲を想定路線から約2 km 程度内を Kanyama 対象地区とした。



(2) サンプル

母集団

母集団の情報は人口統計情報のみであり、統計局および国際研究グループの2020年人口推計値¹に基づく世帯数推計より、4地区の世帯数を用いる。また、産業における事業所統計がないため Heavy Industrial Area 地区では、世帯規模を母集団に置き換えるものとする。4地区全体の推計人口は、128,341人、世帯数は31,667世帯である（Kanyama 地区は対象地区範囲の規模）である。また、母集団から調査する対象者は、内環状道路延伸ルートが住宅地の工業団地を通過

¹ Population and Demographic Projections 2011 – 2035 / Central Statistical Office 2013, GRID3 estimated in 2019 (Zambia Statistic Agency, University of Southampton, , Center for International Earth Science Information Network (CIESIN))

することと沿道商業に配慮し、住宅居住者（世帯）および事業所（卸・問屋等を含む商業・業務および製造業・工業）とする。

調査対象者数

前述の各地区の母集団の規模に基づき、調査対象者数を 500 と設定するが、その統計的な有為な標本誤差は 5%、信頼水準 97%である。各地区の母集団数（推計世帯数）に基づき地区別の調査対象数を以下の表のように設定した。サンプル区分（住居世帯と事業所）については、Heavy Industrial Area 地区は全て事業所、Kanyama 地区および Chibolya 地区は各世帯規模の 5%、Misisi 地区は、他地区と比較し相対的に事業所多いことに配慮し 35%と設定した。

表 地区別の母集団規模（推計人口および世帯）とサンプル調査対象数

Township	目標サンプル調査対象数			母集団	
	サンプル区分	No. of Household	share	Household*3 2020	Population*1 2020
Heavy Industrial Area	住宅世帯	0	0%	1,132	4,416
	事業所	18	100%		
	Sub-total	18	100%		
Kanyama	住宅世帯	287	95%	19,117	76,469
	事業所	15	5%		
	Sub-total	302	100%		
Chibolya	住宅世帯	82	95%	5,558	21,678
	事業所	5	5%		
	Sub-total	87	100%		
Misisi	住宅世帯	61	65%	5,859	25,778
	事業所	32	35%		
	Sub-total	93	100%		
Total	住宅世帯	430	86%	31,667	128,341
	事業所	70	14%		
	Total	500	100%		

出典: 2020 人口推計値: GRID 3 (Geo-referenced Infrastructure and Demographic Data for Development) funded by BMG Foundation, UKaid, with partners of Worldpop Flowminder Organization, UNFPA, Columbia University in association with Zambia Statistics Agency (ZSA).

2020 世帯数は、Central Statistical Office-Population Census 2000～2010 値に基づく世帯規模により JICA 調査団推計

有効回答者数

調査では、現地の治安や訪問先の不在等の様々な調査環境にあったものの、結果的に目標サンプル調査対象数に対し、回答者数は合計 512（住宅世帯 440 事業所 72）となった。

対象地区の留意事項

前述に示した各地区の範囲は、住環境の重要なサービス施設の水供給（Lusaka Water Supply and Sanitation Company および Lusaka Water Trust）が一部を除き過半が整備されている地区

で、コンパウンドの一般的な水供給がない地区とは異なる調査結果を示している。調査結果を考察する上では、その点に配慮する必要がある。

対象地区のプロファイル概要

調査対象者（居住世帯）のプロファイル概要

項目	細項目	地区別回答構成比（％）					項目	細項目	地区別回答構成比（％）						
		HIA	Kanyama	Chibolya	Misisi	Total			HIA	Kanyama	Chibolya	Misisi	Total		
性別	男性	--	67.3	65.9	67.2	67.0	土地所有形態	長期貸借-CT	--	23.5	13.4	23.4	21.6		
	女性	--	32.7	34.1	32.8	33.0		CT-登録中	--	10.5	20.7	15.6	13.2		
	合計	--	100.0	100.0	100.0	100.0		占有権-OCL	--	3.4	1.2	3.1	3.0		
年齢階層	25 歳以下	--	11.9	7.3	14.1	11.4		水供給源	土地登録票	--	6.5	1.2	1.6	4.8	
	26~30 歳	--	12.9	13.4	4.7	11.7			その他	--	0.3	0.0	12.5	2.0	
	31~40 歳	--	30.3	43.9	35.8	33.7			賃貸	--	55.8	63.5	43.8	55.4	
	41~50 歳	--	28.5	26.8	23.5	27.5			合計	--	100.0	100.0	100.0	100.0	
	51 歳以上	--	16.4	8.6	21.9	15.7			水道利用可能時間	上水道	--	67.0	54.9	40.6	61.0
	合計	--	100.0	100.0	100.0	100.0				共同水栓	--	32.0	43.9	50.0	36.8
最終学歴	非就学	--	2.7	2.5	7.8	3.4	汚水排水方法	浅井戸水		--	0.0	1.2	0.0	0.2	
	小学校*1	--	29.2	17.1	40.6	28.6		ボトル水等		--	0.0	0.0	1.6	0.2	
	中高等学校*1	--	54.8	69.5	46.9	56.4		上記組合せ		--	0.7	0.0	1.6	0.7	
	大学*1	--	13.3	10.9	4.7	11.6		表流水		--	0.3	0.0	6.2	1.1	
	合計	--	100.0	100.0	100.0	100.0		合計	--	100.0	100.0	100.0	100.0		
家族数	3 名以下	--	21.8	22.0	26.6	22.5	便所形態	2 時間以内	--	15.2	13.3	23.5	16.1		
	3~5 名	--	54.1	51.2	42.2	51.9		2~6 時間以内	--	6.5	3.7	9.4	6.4		
	6~8 名	--	12.9	14.6	21.8	14.5		6~12 時間以内	--	4.8	6.1	3.1	4.8		
	9 名以上	--	11.2	12.2	9.4	11.1		一日の 7 割	--	20.4	15.9	10.9	18.2		
合計	--	100.0	100.0	100.0	100.0	全日		--	53.1	61.0	53.1	54.5			
雇用形態	無職	--	17.0	34.1	15.6	20.0		ごみ処理方法	合計	--	100.0	100.0	100.0	100.0	
	雇用者*2	--	42.5	26.8	26.6	37.3	敷地内庭等		--	50.3	81.7	45.3	55.5		
	自営業	--	36.1	31.7	50.0	37.3	敷地内溜池		--	6.1	1.2	3.1	4.8		
	上記複合	--	0.7	1.2	0.0	0.7	敷地外垂流し		--	20.1	11.0	23.4	18.9		
	退職者	--	3.7	6.1	7.8	4.8	簡易排水溝		--	17.3	3.7	20.3	15.2		
合計	--	100.0	100.0	100.0	100.0	雨水排水溝	--		1.4	0.0	1.6	1.1			
世帯従業地	近隣	--	8.5	3.7	7.8	7.5	月収入 zmw	下水管	--	4.8	2.4	6.3	4.5		
	地区内	--	53.7	80.5	73.4	61.5		合計	--	100.0	100.0	100.0	100.0		
	市内	--	34.0	14.6	17.2	28.0		堅穴式便所	--	58.8	78.0	76.6	65.0		
	市外	--	3.8	1.2	1.6	3.0		換気堅穴便所	--	16.0	6.1	6.3	12.7		
合計	--	100.0	100.0	100.0	100.0	簡易水洗堅穴		--	12.2	6.1	10.9	10.9			
月収入 zmw	500 以下	--	18.4	22.0	28.1	20.5		ごみ処理方法	水洗便所	--	13.0	9.8	6.2	11.4	
	1,000~2,499	--	37.8	25.5	32.8	34.8	合計		--	100.0	100.0	100.0	100.0		
	2,500~4,999	--	16.3	22.0	14.1	17.0	敷地外投棄		--	18.3	0.0	50.0	19.5		
	5,000~10,000	--	27.5	30.5	21.9	27.2	敷地外焼却		--	1.0	0.0	3.0	1.1		
	10,000 以上	--	0.0	0.0	3.1	0.5	敷地内埋立		--	9.9	22.0	9.4	12.0		
	合計	--	100.0	100.0	100.0	100.0	敷地内焼却		--	4.1	7.3	6.3	5.1		
							業者収集		--	66.7	70.7	31.3	62.3		
							合計		--	100.0	100.0	100.0	100.0		

備考：HIA = Heavy Industrial Area township、*1 非卒業者も含む学歴、*2 臨時雇用を含む、
出典：JICA 調査団

調査対象者（事業所）のプロファイル概要

項目	細項目	地区別回答構成比（％）					項目	細項目	地区別回答構成比（％）				
		HIA	Kanyama	Chibolya	Misisi	Total			HIA	Kanyama	Chibolya	Misisi	Total
性別	男性	88.9	77.8	100.0	19.4	83.3	水供給源	上水道	38.9	83.3	80.0	32.3	50.0
	女性	11.1	22.2	0.0	80.6	16.7		共同水栓	0.0	5.6	20.0	48.4	23.6
	合計	100.0	100.0	100.0	100.0	100.0		井戸水	44.4	0.0	0.0	0.0	11.1
年齢階層	20 歳以下	0.0	5.6	0.0	3.2	2.8		ボトル水等	16.7	5.6	0.0	16.1	12.5
	20~19 歳	11.1	38.9	40.0	38.7	31.9		上記組合せ	0.0	0.0	0.0	0.0	0.0
	30~39 歳	33.3	33.3	20.0	38.7	34.7		表流水	0.0	5.5	0.0	3.2	2.8
	40~39 歳	38.9	22.2	40.0	19.4	26.4		合計	100.0	100.0	100.0	100.0	100.0
	50~60 歳	16.7	0.0	0.0	0.0	4.2	水道利用可能時間	2 時間以内	16.7	11.1	0.0	19.4	15.3
	合計	100.0	100.0	100.0	100.0	100.0		2~6 時間以内	5.6	0.0	20.0	22.6	12.5
最終学歴	非就学	0.0	0.0	0.0	6.5	2.8		6~12 時間以内	5.6	0.0	0.0	0.0	1.4
	小学校*1	0.0	22.2	0.0	25.8	16.7		一日の 7 割	0.0	5.6	20.0	25.8	13.9
	中学校*1	11.1	50.0	60.0	51.6	41.7		全日	72.1	83.3	60.0	32.2	56.9
	大学*1	88.9	27.8	40.0	16.1	38.8		合計	100.0	100.0	100.0	100.0	100.0
	合計	100.0	100.0	100.0	100.0	100.0	汚水排水方法	敷地外垂流し	22.2	66.7	0.0	38.6	38.9
事業所業種	小売り	11.1	61.1	80.0	77.4	56.9		敷地内庭等	11.1	11.1	80.0	19.4	19.4
	卸売り	16.7	11.1	0.0	0.0	6.9		敷地内溜池	22.2	0.0	0.0	9.7	9.7
	業務事務	16.7	22.2	20.0	22.6	20.8		簡易排水溝	0.0	11.1	20.0	9.7	8.3
	建設業	5.6	0.0	0.0	0.0	1.4		雨水排水溝	16.7	0.0	0.0	9.7	8.3
	製造業	38.8	5.6	0.0	0.0	11.1		下水管	27.8	11.1	0.0	12.9	15.3
	その他	11.1	0.0	0.0	0.0	2.9		合計	100.0	100.0	100.0	100.0	100.0
	合計	100.0	100.0	100.0	100.0	100.0	便所形態	竖穴式便所	0.0	5.5	40.0	74.2	36.2
従業員数	5 名以下	0.0	66.7	100.0	84.2	50.9		換気竖穴便所	0.0	50.0	40.0	12.9	20.8
	5~19 名	11.1	33.3	0.0	10.5	17.0		簡易水洗竖穴	11.1	16.7	0.0	9.7	11.1
	20~99 名	66.7	0.0	0.0	5.3	24.5		水洗便所	88.9	27.8	20.0	3.2	31.9
	100 名以上	22.2	0.0	0.0	0.0	7.6		合計	100.0	100.0	100.0	100.0	100.0
	合計	100.0	100.0	100.0	100.0	100.0	ごみ処理方法	敷地外投棄	5.6	44.4	0.0	12.9	18.1
従業員居住地区	無し	5.6	5.6	0.0	9.7	6.9		敷地外焼却	0.0	5.6	0.0	16.1	8.3
	地区内	27.7	94.4	100.0	77.4	70.8		敷地内埋立	0.0	11.1	0.0	22.6	12.5
	地区近隣	5.6	0.0	0.0	0.0	1.4		敷地内焼却	5.6	0.0	40.0	9.7	8.3
	市内	50.0	0.0	0.0	12.9	18.1		業者収集	88.8	38.9	60.0	38.7	52.8
	市外	11.1	0.0	0.0	0.0	2.8		合計	100.0	100.0	100.0	100.0	100.0
	合計	100.0	100.0	100.0	100.0	100.0	土地所有	長期貸借-CT	72.2	55.6	0.0	19.4	40.3
土地所有	CT 申請中	0.0	5.6	0.0	22.6	11.1		占有権-OCL	5.6	5.6	0.0	0.0	2.8
	占有権-OCL	5.6	5.6	0.0	0.0	2.8		その他	0.0	0.0	0.0	6.5	2.8
	その他	0.0	0.0	0.0	6.5	2.8		賃貸	22.2	33.3	100.0	51.6	43.0
	賃貸	22.2	33.3	100.0	51.6	43.0		合計	100.0	100.0	100.0	100.0	100.0
	合計	100.0	100.0	100.0	100.0	100.0							

備考：HIA = Heavy Industrial Area township、*1 非卒業者も含む学歴、出典：JICA 調査団

A-2. 集計表

1 FORM-1. プロフィール

2 基礎情報

3 世帯 : Q4 性別 (回答者)

Q4 Sex (respondent)

	Female	Male	Total
Chibolya	65.9%	34.1%	100.0%
Kanyama	67.3%	32.7%	100.0%
Misisi	67.2%	32.8%	100.0%
Overall	67.0%	33.0%	100.0%

4 事業所 : Q4 性別 (回答者)

Q4 Sex (respondent)

	Female	Male	Total
Chibolya	0.0%	100.0%	100.0%
Kanyama	22.2%	77.8%	100.0%
Misisi	19.4%	80.6%	100.0%
Heavy Industrial Area	11.1%	88.9%	100.0%
Overall	16.7%	83.3%	100.0%

5 世帯 : Q5 年齢 (回答者)

Q5 Age (respondent)

	18~25	26~30	31~35	36~40	41~45	46~50	51~55	55+	Total
Chibolya	7.3%	13.4%	23.2%	20.7%	14.6%	12.2%	3.7%	4.9%	100.0%
Kanyama	11.9%	12.9%	14.3%	16.0%	17.3%	11.2%	5.8%	10.5%	100.0%
Misisi	14.1%	4.7%	28.1%	7.8%	18.8%	4.7%	7.8%	14.1%	100.0%
Overall	11.4%	11.8%	18.0%	15.7%	17.0%	10.5%	5.7%	10.0%	100.0%

6 事業所 : Q5 年齢 (回答者)

Q5 Age (respondent)

	under 20	20~29	30~39	40~49	50~60	Total
--	----------	-------	-------	-------	-------	-------

Chibolya	0.0%	40.0%	20.0%	40.0%	0.0%	100.0%
Kanyama	5.6%	38.9%	33.3%	22.2%	0.0%	100.0%
Misisi	3.2%	38.7%	38.7%	19.4%	0.0%	100.0%
Heavy Industrial Area	0.0%	11.1%	33.3%	38.9%	16.7%	100.0%
Overall	2.8%	31.9%	34.7%	26.4%	4.2%	100.0%

7 世帯 : Q6 学歴 (回答者)

Q6 Highest level of education (respondent)

	none (No formal education)	Primary (Grade 1-7 not completed)	Primary (Completed Grade 7)	Secondary (Grade 8-12 not completed)	Secondary (Grade 8-12 completed)	College or higher (not completed)	College or higher (Completed)	Total
Chibolya	2.4%	4.9%	12.2%	35.4%	34.1%	8.5%	2.4%	100.0%
Kanyama	2.7%	10.2%	19.0%	27.9%	26.9%	8.5%	4.8%	100.0%
Misisi	7.8%	28.1%	12.5%	37.5%	9.4%	3.1%	1.6%	100.0%
Overall	3.4%	11.8%	16.8%	30.7%	25.7%	7.7%	3.9%	100.0%

8 事業所 : Q6 学歴 (回答者)

Q6 Highest level of education (respondent)

	none (No formal education)	Primary (Grade 1-7 not completed)	Primary (Completed Grade 7)	Secondary (Grade 8-12 not completed)	Secondary (Grade 8-12 completed)	College or higher (not completed)	College or higher (Completed)	Total
Chibolya	0.0%	0.0%	0.0%	20.0%	40.0%	0.0%	40.0%	100.0%
Kanyama	0.0%	11.1%	11.1%	16.7%	33.3%	16.7%	11.1%	100.0%
Misisi	6.5%	22.6%	3.2%	25.8%	25.8%	12.9%	3.2%	100.0%
Heavy Industrial Area	0.0%	0.0%	0.0%	0.0%	11.1%	22.2%	66.7%	100.0%
Overall	2.8%	12.5%	4.2%	16.7%	25.0%	15.3%	23.6%	100.0%

9 世帯 : Q7 人数

Q7 Number of household member living together (Including yourself)

	1-3	3-5	6-8	9+	Total
Chibolya	22.0%	51.2%	14.6%	12.2%	100.0%
Kanyama	21.8%	54.1%	12.9%	11.2%	100.0%
Misisi	26.6%	42.2%	21.9%	9.4%	100.0%
Overall	22.5%	51.8%	14.5%	11.1%	100.0%

10 事業所：Q7 フルタイム従業員数

Q7 Number of full-time workers employed by the enterprise

	under 5 (very small)	5~19 (small)	20~99 (medium)	over 100 (large)	Total
Chibolya	100.0%	0.0%	0.0%	0.0%	100.0%
Kanyama	66.7%	33.3%	0.0%	0.0%	100.0%
Misisi	84.2%	10.5%	5.3%	0.0%	100.0%
Heavy Industrial Area	0.0%	11.1%	66.7%	22.2%	100.0%
Overall	50.9%	17.0%	24.5%	7.5%	100.0%

11 事業所：Q8 主な事業所活動の種類

Q8 Major economic activities of your enterprise

	Business services	Construction	Manufacturing	Others	Retail trade	Wholesale trade	Total
Chibolya	20.0%	0.0%	0.0%	0.0%	80.0%	0.0%	100.0%
Kanyama	22.2%	0.0%	5.6%	0.0%	61.1%	11.1%	100.0%
Misisi	22.6%	0.0%	0.0%	0.0%	77.4%	0.0%	100.0%
Heavy Industrial Area	16.7%	5.6%	38.9%	11.1%	11.1%	16.7%	100.0%
Overall	20.8%	1.4%	11.1%	2.8%	56.9%	6.9%	100.0%

12 世帯：Q8 月収 (Kwacha)

Q8 Total monthly household income (kwacha)

	under 500	1000~2499	2500~4999	500~999	5000~10000	above 10000	Total
Chibolya	22.0%	25.6%	22.0%	26.8%	3.7%	0.0%	100.0%
Kanyama	18.4%	37.8%	16.3%	20.4%	7.1%	0.0%	100.0%
Misisi	28.1%	32.8%	14.1%	18.8%	3.1%	3.1%	100.0%
Overall	20.5%	34.8%	17.0%	21.4%	5.9%	0.5%	100.0%

13 世帯：Q9 就業状況

Q9 Occupation (economic activities)/ of a head of household

	multiple (1~3)	not employment	paid employment	part-time job	Retired	running a business	Total
Chibolya	1.2%	34.1%	14.6%	12.2%	6.1%	31.7%	100.0%
Kanyama	0.7%	17.0%	29.9%	12.6%	3.7%	36.1%	100.0%
Misisi	0.0%	15.6%	14.1%	12.5%	7.8%	50.0%	100.0%
Overall	0.7%	20.0%	24.8%	12.5%	4.8%	37.3%	100.0%

14 世帯：Q10 就業場所

Q10 Working place

	neighboring township	outside of the city	same township	within the city	Total
Chibolya	3.66%	1.22%	80.49%	14.63%	100.0%
Kanyama	8.50%	3.74%	53.74%	34.01%	100.0%
Misisi	7.81%	1.56%	73.44%	17.19%	100.0%
Overall	7.50%	2.95%	61.59%	27.95%	100.0%

15 事業所：Q9 従業員の主な宿泊場所

Q9 Dominant living place of full-time workers

	neighboring township	None	outside of the city	same township	within the city	Total
Chibolya	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Kanyama	0.0%	5.6%	0.0%	94.4%	0.0%	100.0%
Misisi	0.0%	9.7%	0.0%	77.4%	12.9%	100.0%
Heavy Industrial Area	5.6%	5.6%	11.1%	27.8%	50.0%	100.0%
Overall	1.4%	6.9%	2.8%	70.8%	18.1%	100.0%

16 建物土地情報

17 世帯：Q11 土地所有状況

Q11 Land tenure status

	Certificate Title (CT)	Land Card Record (LCR)	Occupancy License (OCL)	Others	Renting	Under registration	Total
Chibolya	13.4%	1.2%	1.2%	0.0%	63.4%	20.7%	100.0%
Kanyama	23.5%	6.5%	3.4%	0.3%	55.8%	10.5%	100.0%
Misisi	23.4%	1.6%	3.1%	12.5%	43.8%	15.6%	100.0%
Overall	21.6%	4.8%	3.0%	2.0%	55.5%	13.2%	100.0%

18 事業所：Q10 土地所有状況

Q10 Land tenure status

	Certificate Title	Occupancy License	Others	Renting	Under registration	Total
Chibolya	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Kanyama	55.6%	5.6%	0.0%	33.3%	5.6%	100.0%
Misisi	19.4%	0.0%	6.5%	51.6%	22.6%	100.0%
Heavy Industrial Area	72.2%	5.6%	0.0%	22.2%	0.0%	100.0%
Overall	40.3%	2.8%	2.8%	43.1%	11.1%	100.0%

19 事業所：Q11 事業所の敷地面積

Q11 Property area of the enterprise

	about 25 m ²	about 100 m ²	about 400 m ²	about 900 m ²	about 1600 m ²	over 1600 m ²	総計
Chibolya	40.0%	20.0%	0.0%	40.0%	0.0%	0.0%	100.0%
Kanyama	77.8%	11.1%	5.6%	5.6%	0.0%	0.0%	100.0%

Misisi	67.7%	16.1%	16.1%	0.0%	0.0%	0.0%	100.0%
Heavy Industrial Area	0.0%	0.0%	0.0%	5.6%	22.2%	72.2%	100.0%
Overall	51.4%	11.1%	8.3%	5.6%	5.6%	18.1%	100.0%

20 世帯 : Q12 建物構造

Q12 Type of building (house) structure

	Concrete block masonry	others	Steel/concrete frame	Traditional hut (mud/wood)	Total
Chibolya	98.8%	0.0%	1.2%	0.0%	100.0%
Kanyama	86.7%	12.9%	0.0%	0.3%	100.0%
Misisi	89.1%	6.3%	4.7%	0.0%	100.0%
Overall	89.3%	9.5%	0.9%	0.2%	100.0%

21 事業所：Q12 ビル構造

Q12 Dominant type of building structure (office, storage, factory, etc.)

	Concrete block masonry	others	Reinforced concrete frame	Steel frame	Total
Chibolya	100.0%	0.0%	0.0%	0.0%	100.0%
Kanyama	88.9%	0.0%	0.0%	11.1%	100.0%
Misisi	87.1%	6.5%	0.0%	6.5%	100.0%
Heavy Industrial Area	61.1%	0.0%	11.1%	27.8%	100.0%
Overall	81.9%	2.8%	2.8%	12.5%	100.0%

22 世帯：Q13 部屋数

Q13 Number of total rooms

	1-5	6-10	10-15	15+	Total
Chibolya	69.3%	21.6%	9.1%	0.0%	100.0%
Kanyama	52.9%	28.8%	15.1%	3.2%	100.0%
Misisi	55.2%	35.8%	7.5%	1.5%	100.0%
Overall	56.3%	28.5%	12.8%	2.4%	100.0%

23 世帯：Q14 賃貸部屋数

Q14 Number of rented rooms

	0	1	2	3	4	5	6	7	8+	Total
Chibolya	8.2%	0.0%	49.3%	19.2%	6.8%	9.6%	6.8%	0.0%	0.0%	100.0%
Kanyama	4.3%	7.5%	43.7%	18.3%	11.1%	6.5%	5.4%	3.2%	0.0%	100.0%
Misisi	12.7%	17.5%	33.3%	23.8%	3.2%	4.8%	3.2%	1.6%	0.0%	100.0%
Overall	6.3%	7.7%	43.1%	19.3%	9.2%	6.7%	5.3%	2.4%	0.0%	100.0%

24 世帯：Q15 建物利用

Q15 Use of building

	Residential	Total
Chibolya	100.0%	100.0%
Kanyama	100.0%	100.0%
Misisi	100.0%	100.0%
Overall	100.0%	100.0%

25 電気、上下水、廃棄物処理

26 世帯 : Q16 電力利用

Q16 Is your house connected to electricity?

	No	Yes	Total
Chibolya	9.8%	90.2%	100.0%
Kanyama	12.9%	87.1%	100.0%
Misisi	23.4%	76.6%	100.0%
Overall	13.9%	86.1%	100.0%

27 事業所 : Q13 電力利用

Q13 Electricity

	No	Yes	Total
Chibolya	0.0%	100.0%	100.0%
Kanyama	11.1%	88.9%	100.0%
Misisi	9.7%	90.3%	100.0%
Heavy Industrial Area	0.0%	100.0%	100.0%
Overall	6.9%	93.1%	100.0%

28 世帯 : Q17 飲み水供給源

Q17 Main source of drinking water

	Combination (2-4)	Natural water source	Piped water (tap water-LWSC)	Portable water	Shallow well in the property	Water kiosk outside of the property	Total
Chibolya	0.0%	0.0%	54.9%	0.0%	1.2%	43.9%	100.0%
Kanyama	0.7%	0.3%	67.0%	0.0%	0.0%	32.0%	100.0%
Misisi	1.6%	6.3%	40.6%	1.6%	0.0%	50.0%	100.0%
Overall	0.7%	1.1%	60.9%	0.2%	0.2%	36.8%	100.0%

29 事業所 : Q14 飲み水供給源

Q14 Main source of drinking water

	Borehole	Natural water source	Piped water (tap water-LWSC)	Portable water	Water kiosk outside of the property	Total
Chibolya	0.0%	0.0%	80.0%	0.0%	20.0%	100.0%
Kanyama	0.0%	5.6%	83.3%	5.6%	5.6%	100.0%
Misisi	0.0%	3.2%	32.3%	16.1%	48.4%	100.0%

Heavy Industrial Area	44.4%	0.0%	38.9%	16.7%	0.0%	100.0%
Overall	11.1%	2.8%	50.0%	12.5%	23.6%	100.0%

30 世帯 : Q18 水道供給時間

Q18 Tapwater availability

	Only 1~2 hrs.	Around quarter day (6hrs)	Around half day (7am-7pm)	Around 70% (17 hrs.)	Whole day (24hrs) available	Other	Total
Chibolya	0.0%	4.2%	7.0%	18.3%	70.4%	0.0%	100.0%
Kanyama	1.2%	7.5%	5.5%	23.7%	61.7%	0.4%	100.0%
Misisi	10.9%	10.9%	3.6%	12.7%	61.8%	0.0%	100.0%
Overall	2.4%	7.4%	5.5%	21.1%	63.3%	0.3%	100.0%

31 事業所 : Q15 水道供給時間

Q15 Tapwater availability in a day

	Only 1~2 hrs	Around quarter day (6hrs)	Around half day (7am-7pm)	Arround 70% (17 hrs)	Whole day (24hrs) available	Total
Chibolya	0.0%	20.0%	0.0%	20.0%	60.0%	100.0%
Kanyama	0.0%	0.0%	0.0%	6.3%	93.8%	100.0%
Misisi	7.4%	25.9%	0.0%	29.6%	37.0%	100.0%
Heavy Industrial Area	0.0%	6.7%	6.7%	0.0%	86.7%	100.0%
Overall	3.2%	14.3%	1.6%	15.9%	65.1%	100.0%

32 世帯 : Q19 1日あたりの水使用量 (リットル)

Q19 All water consumption per day (liter)

	under 20 liter in a day (10 pet bottles)	20 ~ 99 L (20 pet-btls)	100 ~ 199 L (40 pet-btls)	over 200 L	Total
Chibolya	7.3%	87.8%	4.9%	0.0%	100.0%
Kanyama	23.8%	69.4%	6.5%	0.3%	100.0%
Misisi	34.4%	57.8%	6.3%	1.6%	100.0%
Overall	22.3%	71.1%	6.1%	0.5%	100.0%

33 事業所 : Q16 産業利用以外の日当たりの飲料水利用 (リットル)

Q16 Drinking water consumption per day (liter) except industrial water use

	under 50 liter in a day	50 ~ 249 L	250 ~ 999 L	over 1000 L	Total
Chibolya	100.0%	0.0%	0.0%	0.0%	100.0%
Kanyama	83.3%	16.7%	0.0%	0.0%	100.0%
Misisi	87.1%	12.9%	0.0%	0.0%	100.0%

Heavy Industrial Area	22.2%	33.3%	16.7%	27.8%	100.0%
Overall	70.8%	18.1%	4.2%	6.9%	100.0%

34 世帯 : Q20 1日あたりの水支出額

Q20 Cost of all water consumption in a day

											Total
Chibolya	0.0%	0.0%	2.4%	2.4%	4.9%	2.4%	8.5%	9.8%	6.1%	63.4%	100.0%
Kanyama	3.7%	3.4%	2.7%	4.4%	2.7%	3.4%	4.4%	4.4%	10.2%	60.5%	100.0%
Misisi	6.3%	7.8%	7.8%	15.6%	7.8%	15.6%	7.8%	6.3%	3.1%	21.9%	100.0%
Overall	3.4%	3.4%	3.4%	5.7%	3.9%	5.0%	5.7%	5.7%	8.4%	55.5%	100.0%

35 世帯 : Q21 主な排水方法

Q21 Key way of discharge of waste water/liquid waste

	To Ditch	To Drainage	To garden/open space in the property	To holding pond in the property	To outside of the property	To sewerage pipe	Total
Chibolya	3.7%	0.0%	81.7%	1.2%	11.0%	2.4%	100.0%
Kanyama	17.3%	1.4%	50.3%	6.1%	20.1%	4.8%	100.0%
Misisi	20.3%	1.6%	45.3%	3.1%	23.4%	6.3%	100.0%
Overall	15.2%	1.1%	55.5%	4.8%	18.9%	4.5%	100.0%

36 事業所 : Q17 主な排水方法

Q17 Way of daily discharge of waste water and liquid waste

	To Ditch	To Drainage	To garden/open space in the property	To holding pond in the property	To outside of the property	To sewerage pipe	Total
Chibolya	20.0%	0.0%	80.0%	0.0%	0.0%	0.0%	100.0%
Kanyama	11.1%	0.0%	11.1%	0.0%	66.7%	11.1%	100.0%
Misisi	9.7%	9.7%	19.4%	9.7%	38.7%	12.9%	100.0%
Heavy Industrial Area	0.0%	16.7%	11.1%	22.2%	22.2%	27.8%	100.0%
Overall	8.3%	8.3%	19.4%	9.7%	38.9%	15.3%	100.0%

37 世帯 : Q22 自宅のトイレの種類

Q22 Type of Toilet in your own property

	Flush toilet	Pour flush latrine	Simple pit latrine	Ventilated Improved Pit latrine (VIP)	Total
Chibolya	9.8%	6.1%	78.0%	6.1%	100.0%

Kanyama	12.9%	12.2%	58.8%	16.0%	100.0%
Misisi	6.3%	10.9%	76.6%	6.3%	100.0%
Overall	11.4%	10.9%	65.0%	12.7%	100.0%

38 事業所：Q18 職場のトイレの種類

Q18 Type of toilet in your enterprise property

	Flash toilet	Pour flush latrine	Simple pit latrine	Ventilated Improved Pit latrine(VIP)	Total
Chibolya	20.0%	0.0%	40.0%	40.0%	100.0%
Kanyama	27.8%	16.7%	5.6%	50.0%	100.0%
Misisi	3.2%	9.7%	74.2%	12.9%	100.0%
Heavy Industrial Area	88.9%	11.1%	0.0%	0.0%	100.0%
Overall	31.9%	11.1%	36.1%	20.8%	100.0%

39 世帯：Q23 毎日の主要ゴミ処理活動

Q23 Daily key activity for solid waste disposal

	Burning solid waste inside the property	Burning solid waste outside the property	Collected by service companies	Dumping and burying to pit in the property	Dumping to outside of the property	Total
Chibolya	7.3%	0.0%	70.7%	22.0%	0.0%	100.0%
Kanyama	4.1%	1.0%	66.7%	9.9%	18.4%	100.0%
Misisi	6.3%	3.1%	31.3%	9.4%	50.0%	100.0%
Overall	5.0%	1.1%	62.3%	12.0%	19.5%	100.0%

40 事業所：Q19 毎日の主要ゴミ処理活動

Q19 Daily activity for solid waste disposal

	Burning solid waste inside the property	Burning solid waste outside the property	Collected by service companies	Dumping and burying to pit in the property	Dumping to outside of the property	Total
Chibolya	40.0%	0.0%	60.0%	0.0%	0.0%	100.0%
Kanyama	0.0%	5.6%	38.9%	11.1%	44.4%	100.0%
Misisi	9.7%	16.1%	38.7%	22.6%	12.9%	100.0%
Heavy Industrial Area	5.6%	0.0%	88.9%	0.0%	5.6%	100.0%
Overall	8.3%	8.3%	52.8%	12.5%	18.1%	100.0%

41 FORM-2. 住環境

42 COVID 19 以前の道路と交通

43 世帯 : Q24 日常の主要交通手段

Q24 Major mode for daily trip (shopping, business, school, etc)

	Bicycle / Motorbike	Public Bus / Mini-bus	Self-owned Vehicle / Car	Taxi or Paid Car	Walk / On-foot	Total
Chibolya	1.2%	63.4%	0.0%	0.0%	35.4%	100.0%
Kanyama	1.4%	42.9%	2.7%	0.7%	52.4%	100.0%
Misisi	1.6%	31.1%	0.0%	0.0%	67.2%	100.0%
Overall	1.4%	45.1%	1.8%	0.5%	51.3%	100.0%

44 事業所 : Q20 フルタイム従業員の主な交通手段

Q20 Major daily commuting mode by full-time workers

	Bicycle / Motorbike	None	Public Bus / Mini-bus	Self-owned Vehicle / Car	Taxi or Paid Car	Walk / On- foot	Total
Chibolya	20.0%	0.0%	60.0%	0.0%	20.0%	0.0%	100.0%
Kanyama	0.0%	5.6%	33.3%	5.6%	5.6%	50.0%	100.0%
Misisi	16.1%	6.5%	16.1%	0.0%	0.0%	61.3%	100.0%
Heavy Industrial Area	5.6%	0.0%	72.2%	5.6%	0.0%	16.7%	100.0%
Overall	9.7%	4.2%	37.5%	2.8%	2.8%	43.1%	100.0%

45 世帯 : Q25 公共交通の利用頻度（バス、ミニバス）

Q25 Use frequency of public transportation (bus or mini-bus)

	never	once~twice in a year	once~twice in a month	once~twice in a week	everyday	Total
Chibolya	0.0%	11.0%	30.5%	31.7%	26.8%	100.0%
Kanyama	5.4%	5.8%	27.2%	32.3%	29.3%	100.0%
Misisi	23.4%	3.1%	20.3%	29.7%	23.4%	100.0%
Overall	7.0%	6.4%	26.8%	31.8%	28.0%	100.0%

46 事業所 : Q21 公共交通の利用頻度（バス、ミニバス）

Q21 Use frequency of public transportation (bus or mini-bus) for worker's commuting

	never	once~twice in a week	once~twice in a month	once~twice in a year	every day	Total
--	-------	-------------------------	--------------------------	-------------------------	-----------	-------

Chibolya	0.0%	20.0%	60.0%	0.0%	20.0%	100.0%
Kanyama	16.7%	27.8%	5.6%	0.0%	50.0%	100.0%
Misisi	32.3%	19.4%	22.6%	6.5%	19.4%	100.0%
Heavy Industrial Area	11.1%	11.1%	5.6%	0.0%	72.2%	100.0%
Overall	20.8%	19.4%	16.7%	2.8%	40.3%	100.0%

47 事業所：Q22 日々の商用車の利用（販売、輸出・輸入、配送、その他）

Q22 Dominant daily business vehicle mode (selling, import/export, delivery, etc.)

	pickup truck / van	semi-trailer truck / heavy truck (28 ft - 36 ft)	standard sedan	standard truck (around 10 freight tonnage)	Others	Total
Chibolya	0.0%	0.0%	20.0%	0.0%	80.0%	100.0%
Kanyama	27.8%	0.0%	22.2%	5.6%	44.4%	100.0%
Misisi	12.9%	0.0%	38.7%	0.0%	48.4%	100.0%
Heavy Industrial Area	11.1%	22.2%	5.6%	61.1%	0.0%	100.0%
Overall	15.3%	5.6%	25.0%	16.7%	37.5%	100.0%

48 世帯：Q26 1 日の移動距離

Q26 Daily trip range (distance)

	almost no trip	township (within 500 m radius)	neighboring area (within 50m radius)	More than 5 km	City wide (within 1~5 km)	Total
Chibolya	4.9%	29.3%	22.0%	18.3%	25.6%	100.0%
Kanyama	10.2%	38.1%	23.8%	11.6%	16.3%	100.0%
Misisi	17.2%	35.9%	25.0%	1.6%	20.3%	100.0%
Overall	10.2%	36.1%	23.6%	11.4%	18.6%	100.0%

49 世帯：Q27 主要道路から家までのアクセス道路の状況

Q27 Dominant physical conditions of access road from your home to trunk roads

	good pavement and wide enough	no pavement but acceptable surface and width	very bad condition by bumping surface and narrow	Total
Chibolya	2.4%	18.3%	79.3%	100.0%
Kanyama	7.1%	19.0%	73.8%	100.0%
Misisi	20.3%	15.6%	64.1%	100.0%
Overall	8.2%	18.4%	73.4%	100.0%

50 業所：Q23 事業所施設から幹線道路へのアクセス道路の路面等物理的な状況

Q23 Dominant physical conditions of access road from your enterprise to trunk roads

	good pavement and wide enough	no pavement but acceptable surface and width	very bad condition by bumping surface and narrow	Total
Chibolya	0.0%	40.0%	60.0%	100.0%
Kanyama	16.7%	38.9%	44.4%	100.0%
Misisi	22.6%	29.0%	48.4%	100.0%
Heavy Industrial Area	33.3%	33.3%	33.3%	100.0%
Overall	22.2%	33.3%	44.4%	100.0%

51 世帯 : Q28 近隣道路での交通事故状況（うわさを含む回答者の意見）

Q28 Traffic accident in neighboring roads by responder or hearsay

	many times in past years including hearsay	never including hearsay in neighboring roads	once-twice in several years past including hearsay	Total
Chibolya	3.7%	75.6%	20.7%	100.0%
Kanyama	11.6%	59.2%	29.3%	100.0%
Misisi	23.4%	32.8%	43.8%	100.0%
Overall	11.8%	58.4%	29.8%	100.0%

52 世帯 : Q29 近隣道路及び交通改善の優先度（複数回答）

Q29 Priority improvement of neighboring roads and transport

	Construction of new roads	drainage improvement	No improvement	public transportation	surface improvement by pavement	traffic control avoiding traffic congestion	widening road
Chibolya	47.6%	85.4%	0.0%	1.2%	32.9%	1.2%	30.5%
Kanyama	45.2%	73.8%	1.4%	0.7%	38.1%	3.4%	22.8%
Misisi	35.9%	48.4%	10.9%	9.4%	28.1%	12.5%	25.0%
Total	44.3%	72.3%	2.5%	2.0%	35.7%	4.3%	24.5%

53 事業所 : Q24 近隣道路改善の優先度

Q24 Priority improvement or development of roads surroundings of your enterprise

	drainage improvement in your surroundings of the property	drainage improvement in your surroundings of the property	drainage improvement in your surroundings of the property	drainage improvement in your surroundings of the property	drainage improvement in your surroundings of the property
Chibolya	100.0%	40.0%	0.0%	40.0%	40.0%
Kanyama	88.9%	22.2%	33.3%	16.7%	38.9%
Misisi	51.6%	32.3%	12.9%	19.4%	29.0%
Heavy Industrial Area	66.7%	16.7%	16.7%	33.3%	33.3%
Overall	68.1%	26.4%	18.1%	23.6%	33.3%

54 自然災害リスク

55 世帯 : Q30 自宅の氾濫・洪水被害頻度

Q30 Inundation or flood frequency in your house

	never	once~twice in a year	once~twice in several months	once~twice in several years interval	Total
Chibolya	0.0%	42.7%	48.8%	8.5%	100.0%
Kanyama	10.9%	49.7%	23.8%	15.6%	100.0%
Misisi	10.9%	43.8%	23.4%	21.9%	100.0%
Overall	8.9%	47.5%	28.4%	15.2%	100.0%

56 事業所 : Q25 敷地での氾濫・洪水被害頻度

Q25 Inundation / flood frequency in your property in the past

	Entire rainy season	never	once~twice in a year	once~twice in several months	once~twice in several years interval	Total
Chibolya	40.0%	0.0%	40.0%	0.0%	20.0%	100.0%
Kanyama	22.2%	5.6%	33.3%	33.3%	5.6%	100.0%
Misisi	32.3%	22.6%	32.3%	9.7%	3.2%	100.0%
Heavy Industrial Area	33.3%	22.2%	33.3%	0.0%	11.1%	100.0%
Overall	30.6%	16.7%	33.3%	12.5%	6.9%	100.0%

57 世帯 : Q31 氾濫・洪水深

Q31 What is the height of water by inundation or flood in case of inundation?

	covering ground floor (under 30 cm)	water up to knee	water up to one (1) meter	over one (1) meter	Total
Chibolya	54.9%	35.4%	9.8%	0.0%	100.0%
Kanyama	51.4%	38.4%	8.5%	1.7%	100.0%
Misisi	62.5%	26.6%	9.4%	1.6%	100.0%
Overall	53.6%	36.1%	8.9%	1.4%	100.0%

58 事業所 : Q26 敷地での氾濫・洪水被害頻度

Q26 Frequently occurred height of water by inundation / flood in case of inundation

	covering ground floor (under 30 cm)	over one (1) meter	water up to knee	water up to one (1) meter	Total
Chibolya	60.0%	0.0%	20.0%	20.0%	100.0%
Kanyama	66.7%	0.0%	27.8%	5.6%	100.0%

Misisi	80.6%	0.0%	12.9%	6.5%	100.0%
Heavy Industrial Area	77.8%	5.6%	16.7%	0.0%	100.0%
Overall	75.0%	1.4%	18.1%	5.6%	100.0%

59 世帯 : Q32 氾濫・洪水発生から水が完全に引けるまでの日数

Q32 Dominant length of day for continuous inundation / flood until being discharged completely

	within one day	2~3 days	one week	over one week	Total
Chibolya	2.4%	26.8%	13.4%	57.3%	100.0%
Kanyama	19.7%	19.4%	21.4%	39.5%	100.0%
Misisi	18.8%	45.3%	15.6%	20.3%	100.0%
Overall	16.4%	24.5%	19.1%	40.0%	100.0%

60 事業所 : Q27 氾濫・洪水発生から水が完全に引けるまでの日数

Q27 Dominant length of day for continuous inundation / flood until being discharged completely

	within one day	2~3 days	one week	over one week	Total
Chibolya	0.0%	0.0%	0.0%	100.0%	100.0%
Kanyama	11.1%	55.6%	22.2%	11.1%	100.0%
Misisi	38.7%	35.5%	9.7%	16.1%	100.0%
Heavy Industrial Area	44.4%	38.9%	0.0%	16.7%	100.0%
Overall	30.6%	38.9%	9.7%	20.8%	100.0%

61 世帯 : Q33 過去の公共機関による氾濫・洪水の自宅被害への対応

Q33 Past public responses to inundation or flood in surroundings of your house

	cleaning and sanitizing inundation area	discharging water by pump	no action or response	others	Total
Chibolya	0.0%	1.2%	98.8%	0.0%	100.0%
Kanyama	2.4%	5.4%	87.4%	4.8%	100.0%
Misisi	12.5%	6.3%	75.0%	6.3%	100.0%
Overall	3.4%	4.8%	87.7%	4.1%	100.0%

62 事業所：Q28 過去の公共機関による氾濫・洪水の社屋施設等被害への対応

Q28 Past public responses to inundation or flood in surroundings of your property

Chibolya	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Kanyama	0.0%	57.9%	5.3%	31.6%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	100.0%
Misisi	8.3%	11.1%	0.0%	52.8%	2.8%	13.9%	2.8%	2.8%	2.8%	2.8%	100.0%
Heavy Industrial Area	5.6%	11.1%	0.0%	83.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Overall	5.1%	21.8%	1.3%	57.7%	1.3%	7.7%	1.3%	1.3%	1.3%	1.3%	100.0%

FORM-3. 衛生

62.1 上下水利用状況

63 世帯：Q34 処理前の水源の見た目の水質

Q34 Perceived water quality of main source of water before treatment

	Acceptable but with treatment	Acceptable enabling to drink directly	Bad	Very bad	Total
Chibolya	40.2%	54.9%	0.0%	4.9%	100.0%
Kanyama	40.1%	50.3%	4.1%	5.4%	100.0%
Misisi	25.0%	48.4%	9.4%	17.2%	100.0%
Overall	38.0%	50.9%	4.1%	7.0%	100.0%

64 事業所：Q29 処理前の水源の見た目の水質

Q29 Perceived water quality of main source of water before treatment

	Acceptable but with treatment	Acceptable enabling to drink directly	Bad	Very bad	Total
Chibolya	40.0%	40.0%	0.0%	20.0%	100.0%

Kanyama	77.8%	16.7%	0.0%	5.6%	100.0%
Misisi	45.2%	38.7%	3.2%	12.9%	100.0%
Heavy Industrial Area	66.7%	27.8%	0.0%	5.6%	100.0%
Overall	58.3%	30.6%	1.4%	9.7%	100.0%

65 世帯 : Q35 主要水源が原因での伝染病の原因

Q35 Have you ever suffered by any communicable diseases caused by its main source water?

	Never ever before	No but hearsay somebody neighboring area or my township	Yes, but few times within five years before	Yes, frequently suffered	Total
Chibolya	72.0%	17.1%	11.0%	0.0%	100.0%
Kanyama	78.6%	8.8%	10.2%	2.4%	100.0%
Misisi	68.8%	12.5%	15.6%	3.1%	100.0%
Overall	75.9%	10.9%	11.1%	2.0%	100.0%

66 事業所 : Q30 主要水源が原因での伝染病の原因

Q30 Have you ever suffered by any communicable diseases caused by its main source water?

	Never ever before	No but hearsay somebody neighboring area or my township	Yes, but few times within five years before	Yes, frequently suffered	Total
Chibolya	80.0%	0.0%	20.0%	0.0%	100.0%
Kanyama	55.6%	11.1%	22.2%	11.1%	100.0%
Misisi	77.4%	12.9%	3.2%	6.5%	100.0%
Heavy Industrial Area	100.0%	0.0%	0.0%	0.0%	100.0%
Overall	77.8%	8.3%	8.3%	5.6%	100.0%

67 世帯 : Q36 毎日の飲料水の処理

Q36 Daily treatment for drinking water

	Boiling the source of water	Nothing and drinking or using the source of water directly	Other treatment	Total
Chibolya	4.9%	91.5%	3.7%	100.0%
Kanyama	15.0%	69.7%	15.3%	100.0%
Misisi	26.6%	62.5%	10.9%	100.0%
Overall	14.8%	72.7%	12.5%	100.0%

68 事業所 : Q31 毎日の飲料水の処理

Q31 Daily treatment for drinking water

	Boiling the source of water	Nothing and drinking or using the source of water directly	Other treatment	Total
Chibolya	0.0%	80.0%	20.0%	100.0%
Kanyama	55.6%	22.2%	22.2%	100.0%
Misisi	29.0%	58.1%	12.9%	100.0%
Heavy Industrial Area	5.6%	50.0%	44.4%	100.0%
Overall	27.8%	48.6%	23.6%	100.0%

69 世帯 : Q37 他の世帯の人の自宅トイレ使用

Q37 Sharing the use of toilet of your property with other household members

	No only for family members	Yes sharing with other household	Total
Chibolya	9.8%	90.2%	100.0%
Kanyama	16.3%	83.7%	100.0%
Misisi	9.4%	90.6%	100.0%
Overall	14.1%	85.9%	100.0%

70 世帯 : Q38 家にトイレがない場合の糞便・排泄物の日常的の処理

Q38 Daily treatment of faeces/excretory in case of no toilet in the property

	Other	To a pit in the property	to ditches	To Drainage	To garden/open space in the property	To outside of the property	To sewerage	Total
Chibolya	30.5%	13.4%	34.1%	0.0%	17.1%	1.2%	3.7%	100.0%
Kanyama	18.4%	18.4%	13.6%	1.4%	4.8%	16.7%	26.9%	100.0%
Misisi	15.6%	21.9%	23.4%	0.0%	4.7%	12.5%	21.9%	100.0%
Overall	20.2%	18.0%	18.9%	0.9%	7.0%	13.2%	21.8%	100.0%

71 事業所：Q32 敷地内トイレがない場合の糞便・排泄物の日常的処理

Q32 Daily treatment of feces/excretory in case of no toilet in the property

	To Ditch	To Drainage	To garden/open space in the property	To holding pond in the property	To outside of the property	To sewerage	Total
Chibolya	40.0%	0.0%	20.0%	20.0%	0.0%	20.0%	100.0%
Kanyama	5.6%	0.0%	5.6%	11.1%	55.6%	22.2%	100.0%
Misisi	22.6%	6.5%	12.9%	9.7%	25.8%	22.6%	100.0%
Heavy Industrial Area	0.0%	0.0%	5.6%	0.0%	5.6%	88.9%	100.0%
Overall	13.9%	2.8%	9.7%	8.3%	26.4%	38.9%	100.0%

72 世帯：Q39 排便後の手洗いの方法

Q39 Daily way of handwashing after defecating

	Nothing to do as it is	Washing hands by water only	Washing hands by water with sanitizer	Washing hands by water with soap	Total
Chibolya	3.7%	25.6%	4.9%	65.9%	100.0%
Kanyama	1.0%	21.4%	6.8%	70.7%	100.0%
Misisi	1.6%	34.4%	1.6%	62.5%	100.0%
Overall	1.6%	24.1%	5.7%	68.6%	100.0%

73 事業所：Q33 排便後の手洗いの方法

Q33 Daily way of handwashing after defecating

	Nothing to do as it is	Washing hands by water only	Washing hands by water with sanitizer	Washing hands by water with soap	Total
Chibolya	0.0%	0.0%	20.0%	80.0%	100.0%
Kanyama	0.0%	22.2%	11.1%	66.7%	100.0%
Misisi	3.2%	25.8%	12.9%	58.1%	100.0%
Heavy Industrial Area	0.0%	0.0%	33.3%	66.7%	100.0%
Overall	1.4%	16.7%	18.1%	63.9%	100.0%

74 世帯：Q40 手洗いの頻度

Q40 How frequently do you wash your hands?

	Frequently after some works by hands	No handwash without water use	Sometimes due to insufficient water use	Total
Chibolya	78.0%	1.2%	20.7%	100.0%

Kanyama	89.1%	0.7%	10.2%	100.0%
Misisi	71.9%	1.6%	26.6%	100.0%
Overall	84.5%	0.9%	14.5%	100.0%

75 事業所：Q34 日常の手洗いの方法

Q34 How to do daily handwash

	Frequently after some works by hands	Sometimes due to insufficient water use	Total
Chibolya	100.0%	0.0%	100.0%
Kanyama	83.3%	16.7%	100.0%
Misisi	77.4%	22.6%	100.0%
Heavy Industrial Area	100.0%	0.0%	100.0%
Overall	86.1%	13.9%	100.0%

76 感染症・公害

77 世帯：Q41 5年以内に家族が経験した病気（複数回答）

Q41 Type of disease experienced in family within current 5 years

	Suffered by cholera	Suffered by dysentery	Suffered by hepatitis-A	Suffered by malaria	Suffered by typhoid
Chibolya	7.3%	4.9%	0.0%	37.8%	1.2%
Kanyama	5.1%	1.4%	1.0%	37.8%	0.7%
Misisi	9.4%	12.5%	0.0%	54.7%	1.6%
Overall	6.1%	3.6%	0.7%	40.2%	0.9%

78 事業所：Q35 5年以内に従業員が経験した病気（複数回答）

Q35 Past experiences (past 5 years) among full-time workers in your property

	Nobody in family suffered by diseases before	Suffered by cholera	Suffered by dysentery	Suffered by malaria	Others
Chibolya	40.0%	20.0%	0.0%	40.0%	20.0%
Kanyama	72.2%	11.1%	0.0%	22.2%	5.6%
Misisi	29.0%	19.4%	3.2%	51.6%	16.1%
Heavy Industrial Area	72.2%	0.0%	0.0%	16.7%	11.1%
Overall	51.4%	12.5%	1.4%	34.7%	12.5%

79 事業所：Q36 従業員が事業所内で経験した疫病

Q36 Type of cause in the property for experienced communicable diseases

	Caused by contamination of drinking water (poor waste water	Caused by poor drainage system (inundation and/or flood)	I did not know the cause	Others	Total
--	--	---	-----------------------------	--------	-------

	treatment and/or solid waste collection system)				
Chibolya	0.0%	40.0%	40.0%	20.0%	100.0%
Kanyama	5.6%	16.7%	66.7%	11.1%	100.0%
Misisi	9.7%	29.0%	41.9%	19.4%	100.0%
Heavy Industrial Area	5.6%	5.6%	72.2%	16.7%	100.0%
Overall	6.9%	20.8%	55.6%	16.7%	100.0%

80 世帯 : Q42 家族が病気になった主要原因

Q42 Main causes of diseases experienced in the household?

	Caused by contamination of drinking water (poor waste water treatment and/or solid waste collection system)	Caused by poor drainage system (inundation and/or flood)	I did not know the cause	Others	Total
Chibolya	4.9%	26.8%	48.8%	19.5%	100.0%
Kanyama	3.4%	23.5%	50.3%	22.8%	100.0%
Misisi	14.1%	23.4%	45.3%	17.2%	100.0%
Overall	5.2%	24.1%	49.3%	21.4%	100.0%

81 世帯 : Q43 過去 5 年間に聞いたコミュニティ（タウンシップ）での伝染病

Q43 Heard of communicable diseases in the community or township in the past (5Ys)

	Member of community by one or two times in five years	There were many infected people in the five years past	Never ever before	Total
Chibolya	37.8%	12.2%	50.0%	100.0%
Kanyama	32.3%	31.3%	36.4%	100.0%
Misisi	34.4%	28.1%	37.5%	100.0%
Overall	33.6%	27.3%	39.1%	100.0%

82 事業所 : Q37 過去 5 年間に聞いた産業エリアもしくはタウンシップでの伝染病

Q37 Hearsay of communicable diseases in the industrial areas or township in the past (5Ys)

	Member of community by one or two times in five years	There were many infected people in the five years past	Never ever before	Total
Chibolya	60.0%	0.0%	40.0%	100.0%
Kanyama	16.7%	11.1%	72.2%	100.0%
Misisi	38.7%	16.1%	45.2%	100.0%
Heavy Industrial Area	16.7%	0.0%	83.3%	100.0%

Overall	29.2%	9.7%	61.1%	100.0%
---------	-------	------	-------	--------

83 衛生改善の必要性と要請

84 世帯 : Q44 家で自分でできる衛生改善活動（複数回答）

Q44 Things you can improve sanitary and hygiene conditions by yourself in your house

	Daily activities complying with Government Instruction	Limited activities and behavior changes (mask, hand-wash)	Nothing because of busy conditions with our own life even now	Nothing because of no information by how to do responses
Chibolya	31.7%	86.6%	22.0%	1.2%
Kanyama	49.3%	59.9%	18.0%	9.2%
Misisi	48.4%	56.3%	15.6%	25.0%
Overall	45.9%	64.3%	18.4%	10.0%

85 事業所 : Q38 事業所内の従業員でできる衛生改善活動

Q38 Things you can improve sanitary and hygiene conditions by workers in your enterprise

	Daily activities complying with Government Instruction	Limited activities and behavior changes (mask, hand-wash)	No worker employed	Nothing because of busy conditions with our own life even know	Nothing because of no information by how to do responses	Others	Total
Chibolya	0.0%	80.0%	20.0%	0.0%	0.0%	0.0%	100.0%
Kanyama	16.7%	55.6%	11.1%	5.6%	11.1%	0.0%	100.0%
Misisi	16.1%	32.3%	22.6%	19.4%	9.7%	0.0%	100.0%
Heavy Industrial Area	44.4%	16.7%	0.0%	16.7%	5.6%	16.7%	100.0%
Overall	22.2%	37.5%	13.9%	13.9%	8.3%	4.2%	100.0%

86 世帯 : Q45 コミュニティでの公衆衛生改善の優先要請

Q45 Priority request to improve sanitary and hygiene conditions your community

	Deliver necessary protection kit to the community	Develop or improve clean water supply system	Dissemination or sensitization about communicable diseases	Improve drainage system to mitigate inundation / flood	Improve garbage collection and sanitization in public spaces	Others	Total
Chibolya	4.9%	8.6%	8.0%	41.7%	36.8%	0.0%	100.0%
Kanyama	5.0%	5.6%	9.9%	43.6%	35.8%	0.2%	100.0%

Mis isi	9.8%	13.4%	11.6%	33.0%	30.4%	1.8%	100.0%
Over all	5.7%	7.3%	9.7%	41.7%	35.2%	0.4%	100.0%

87 事業所：Q39 事業所内で公衆衛生改善の優先要請（複数回答）

Q39 Priority request to improve sanitary and hygiene conditions your business block

	Deliver necessary protection kit to the community	Develop or improve clean water supply system	Dissemination or sensitization about communicable diseases	Improve drainage system to mitigate inundation / flood	Improve garbage collection and sanitization in public spaces
Chibolya	0.0%	40.0%	0.0%	100.0%	80.0%
Kanyama	5.6%	16.7%	16.7%	94.4%	61.1%
Misisi	16.1%	16.1%	29.0%	54.8%	54.8%
Heavy Industrial Area	11.1%	16.7%	11.1%	61.1%	33.3%
Overall	11.1%	18.1%	19.4%	69.4%	52.8%

88 FORM-4. COVID 19 の影響と対策

89 COVID 19 の知識認識

90 世帯 : Q46 COVID 19 の認知度

Q46 What is COVID 19?

	I do not know about it	Knowing the risks and necessary responses to COVID 19	Knowing the risks in general but a few knowledges of response	Only name as one of Cold Viruses but nothing about in details	Total
Chibolya	0.0%	31.7%	50.0%	18.3%	100.0%
Kanyama	1.4%	34.0%	42.2%	22.4%	100.0%
Misisi	9.4%	28.1%	23.4%	39.1%	100.0%
Overall	2.3%	32.7%	40.9%	24.1%	100.0%

91 事業所 : Q40 COVID 19 の認知度（複数回答）

Q40 What is COVID 19 (respondent only)

	I do not know about it	Knowing the risks and necessary responses to COVID 19	Knowing the risks in general but a few knowledge of response	Only name as one of Cold Viruses but nothing about in details
Chibolya	0.0%	20.0%	40.0%	40.0%
Kanyama	0.0%	77.8%	11.1%	11.1%
Misisi	12.9%	45.2%	25.8%	16.1%
Heavy Industrial Area	0.0%	50.0%	33.3%	16.7%
Total	5.6%	52.8%	25.0%	16.7%

92 世帯 : Q47 COVID 19 の影響と対策に対する理解

Q47 Understanding COVID 19 impacts and necessary responses to be prevented

	I do not know anything about the impacts and necessary responses	I know impacts and necessary actions by community's campaign	I know impacts and necessary actions by the government campaign	I know impacts and necessary responses through media (TV, etc.)	Total
Chibolya	1.2%	12.2%	15.9%	70.7%	100.0%
Kanyama	1.4%	15.3%	11.6%	71.8%	100.0%
Misisi	15.6%	26.6%	14.1%	43.8%	100.0%
Overall	3.4%	16.4%	12.7%	67.5%	100.0%

93 事業所：Q41 COVID 19 の影響と対策に対する理解（複数回答）

Q41 Understanding COVID 19 impacts and necessary responses to be prevented (respondent only)

行ラベル	I do not know anything about the impacts and necessary responses	I know impacts and necessary actions by community's campaign	I know impacts and necessary actions by the government campaign	I know impacts and necessary responses through media (TV, etc.)
Chibolya	0.0%	0.0%	0.0%	100.0%
Kanyama	0.0%	5.6%	5.6%	88.9%
Misisi	6.5%	29.0%	29.0%	35.5%
Heavy Industrial Area	0.0%	16.7%	11.1%	72.2%
Total	2.8%	18.1%	16.7%	62.5%

94 COVID 19 の生活への悪影響

95 世帯：Q48 金銭面への最大の悪影響（複数回答）

Q48 The most affected negative impacts on financial condition and earnings

	Increasing loan / borrowing money from others for daily life	Losing or decreasing most of the savings	Lost of regular earning job / business completely	Regular earning decreased
Chibolya	40.2%	29.3%	35.4%	75.6%
Kanyama	20.4%	27.9%	57.8%	67.0%
Misisi	17.2%	15.6%	56.3%	64.1%
Overall	23.6%	26.4%	53.4%	68.2%

96 事業所：Q42 事業所の収益面での最大の悪影響（複数回答）

Q42 The most affected negative impacts on financial condition and business earnings (Multiple Selection)

	Increasing loan / borrowing money from others for daily business	Increasing loan / borrowing money from others for daily businesses	Losing or decreasing most of the savings	Lost completely of regular earnings	Regular earnings decreased
Chibolya	40.0%	20.0%	20.0%	40.0%	80.0%
Kanyama	44.4%	16.7%	27.8%	27.8%	61.1%
Misisi	19.4%	0.0%	25.8%	29.0%	77.4%
Heavy Industrial Area	22.2%	0.0%	33.3%	27.8%	61.1%
Overall	27.8%	5.6%	27.8%	29.2%	69.4%

97 世帯：Q49 COVID 19 の日常生活への主な影響（複数回答）

Q49 Dominant change on daily life by COVID 19 pandemic

	Avoiding public gathering places (terminal, market, shopping places)	Careful behavior to keep good hygiene in home	Increasing stay-at-home	Losing earnings and less daily food to live	Nothing changed to keep daily life and secure livelihood
Chibolya	58.5%	23.2%	18.3%	48.8%	1.2%
Kanyama	45.2%	31.3%	22.8%	43.5%	7.1%
Misisi	35.9%	26.6%	34.4%	35.9%	28.1%
Overall	46.4%	29.1%	23.6%	43.4%	9.1%

98 事業所：Q43 COVID 19 の日常の事業所活動への主な影響（複数回答）

Q43 Dominant change on daily business by COVID 19 pandemic

	Avoiding works for gathering in the property	Being closed to business / shutdown	Increasing suspension of operation due to worker's stay-at-home	Losing earnings and difficult to pay leave allowance or compensation for workers	No change but careful activities to keep good hygiene in the enterprise
Chibolya	20.0%	40.0%	20.0%	40.0%	40.0%
Kanyama	27.8%	22.2%	55.6%	0.0%	44.4%
Misisi	22.6%	35.5%	25.8%	25.8%	19.4%
Heavy Industrial Area	27.8%	16.7%	44.4%	16.7%	33.3%
Overall	25.0%	27.8%	37.5%	18.1%	30.6%

99 世帯 : Q50 健康管理に対する悪影響（複数回答）

Q50 What kinds of negative impact on health care condition or opportunity

	Increasing difficulties to access to health care service	Nothing changed because of no access to take health care	Increasing cost for health care of household including medicine	Over capacity due to chronic disease to cope with COVID 19
Chibolya	36.6%	14.6%	59.8%	37.8%
Kanyama	53.4%	13.3%	57.5%	26.2%
Misisi	31.3%	40.6%	45.3%	23.4%
Overall	47.0%	17.5%	56.1%	28.0%

100 事業所 : Q44 健康管理に対する悪影響（複数回答）

Q44 What kinds of negative impact on health care condition or opportunity

	Increasing cost for health care of workers including medicine	Increasing difficulties to access to health care service	Nothing changed because of no access to take health care	Over capacity due to chronic disease to cope with COVID 19
Chibolya	60.0%	0.0%	20.0%	40.0%
Kanyama	55.6%	33.3%	27.8%	38.9%
Misisi	29.0%	35.5%	29.0%	38.7%
Heavy Industrial Area	27.8%	44.4%	38.9%	33.3%
Overall	37.5%	34.7%	30.6%	37.5%

101 COVID 19 感染防止のために行っている対策

102 世帯 : Q51 COVID 19 に対する日々の対策（複数回答）

Q51 Responses you are taking daily to prevent COVID 19 infection

	Avoid hand shaking daily	Handwash daily	Keep 1-2 meters away from others in public places	Stay-at-home daily avoiding non-essential travel	With face mask daily	Nothing
Chibolya	37.8%	64.6%	68.3%	82.9%	46.3%	0.0%
Kanyama	25.2%	78.6%	59.9%	53.7%	51.0%	0.3%
Misisi	31.3%	67.2%	65.6%	46.9%	39.1%	6.3%
Overall	28.4%	74.3%	62.3%	58.2%	48.4%	1.1%

103 事業所 : Q45 COVID 19 に対する日々の対策（複数回答）

Q45 Responses you are taking daily to prevent COVID 19 infection

	Nothing	Avoid hand shaking daily	Handwash daily	Keep 1-2 meters away from others in	Stay-at-home daily avoiding non-essential travel	With face mask daily
--	---------	--------------------------	----------------	-------------------------------------	--	----------------------

				working areas of the enterprise		
Chibolya	0.0%	60.0%	80.0%	60.0%	60.0%	100.0%
Kanyama	0.0%	38.9%	38.9%	66.7%	38.9%	100.0%
Misisi	3.2%	22.6%	61.3%	45.2%	25.8%	100.0%
Heavy Industrial Area	0.0%	5.6%	88.9%	66.7%	11.1%	100.0%
Overall	1.4%	25.0%	63.9%	56.9%	27.8%	100.0%

104 世帯 : Q52 対策ができない理由（複数回答）

Q52 Reason of responses which you cannot do

	No appropriate guide and instruction to prevent COVID19 infection	No financial capacity without daily earnings to do stay-at-home	Not enough financial capacity to buy health hygiene care goods	Not enough space to keep daily distance avoiding COVID19 infection	Not enough water source to wash hands and dishes to keep clean daily	Others
Chi bol ya	20.7%	69.5%	76.8%	15.9%	0.0%	0.0%
Kan ya ma	9.5%	54.4%	62.6%	27.9%	7.1%	2.0%
Misi si	15.6%	46.9%	56.3%	35.9%	26.6%	0.0%
Ov eral l	12.5%	56.1%	64.3%	26.8%	8.6%	1.4%

105 事業所 : Q46 対策ができない理由（複数回答）

Q46 Reason of responses which your enterprise with workers cannot do

	No appropriate guide and instruction to prevent COVID19 infection	No financial capacity without daily earnings to do stay-at-home	Not enough financial capacity to buy health hygiene care goods	Not enough space to keep daily distance avoiding COVID19 infection	Not enough water source to wash hands and dishes to keep clean daily	Others
Chibolya	20.0%	40.0%	80.0%	20.0%	0.0%	20.0%
Kanyama	0.0%	66.7%	66.7%	33.3%	5.6%	5.6%
Misisi	9.7%	32.3%	48.4%	35.5%	19.4%	19.4%
Heavy Industrial Area	22.2%	22.2%	16.7%	33.3%	11.1%	33.3%
Overall	11.1%	38.9%	47.2%	33.3%	12.5%	19.4%

106 世帯 : Q53 COVID 19 に対するコミュニティの対応・活動（複数回答）

Q53 Responses your community (township/Ward) are taking now to prevent COVID 19 pandemic.

	Campaign activity to promote appropriate response by community	Delivering personal health goods (face mask, sanitizer, etc.)	Sanitization public spaces periodically in the community	Not specific activities
Chibolya	43.9%	40.2%	26.8%	26.8%
Kanyama	34.4%	24.5%	18.0%	51.7%
Misisi	26.6%	42.2%	26.6%	48.4%
Overall	35.0%	30.0%	20.9%	46.6%

107 事業所：Q47 COVID 19 に対するコミュニティの対応・活動（複数回答）

Q47 Responses your business community (township/Ward) are taking now to prevent COVID 19 pandemic

	Campaign activity to promote appropriate response by association	Delivering personal health goods (facemask, sanitizer, etc.)	Sanitization public spaces periodically in the business blocks	Not specific activities
Chibolya	60.0%	40.0%	40.0%	20.0%
Kanyama	61.1%	44.4%	50.0%	16.7%
Misisi	41.9%	29.0%	38.7%	35.5%
Heavy Industrial Area	33.3%	38.9%	38.9%	33.3%
Overall	45.8%	36.1%	41.7%	29.2%

108 COVID 19 に対して政府や個人・事業者が実施できる対策・活動

109 世帯：Q54 COVID 19 に対する個人での更なる対策・活動（複数回答）

Q54 Further necessary individual actions/behavior to prevent COVID 19 infection.

	Avoiding gathering including religious events from causal clustering infection	Avoiding public gathering places (terminal, market, shopping places)	Nothing to be able to do things further	Participating events to learn necessary responses to COVID19 infection	Performing faithfully activities or behavior instructed by the government
Chibolya	51.2%	74.4%	0.0%	22.0%	13.4%
Kanyama	48.0%	45.9%	12.6%	14.3%	33.0%
Misisi	42.2%	35.9%	23.4%	20.3%	34.4%
Overall	47.7%	49.8%	11.8%	16.6%	29.5%

110 事業所：Q48 COVID 19 に対する事業所での更なる対策・活動（複数回答）

Q48 Further necessary actions/behavior by your company to prevent COVID 19 infection

	Avoiding gathering style of works from causal clustering infection	Increasing tele-business communication (web-meeting,	Nothing to be able to do things further	Participating events to learn necessary	Performing faithfully activities or behavior
--	--	--	---	---	--

		telephone, remote works)		responses to COVID19 infection	instructed by the government
Chibolya	60.0%	60.0%	0.0%	40.0%	20.0%
Kanyama	61.1%	44.4%	5.6%	5.6%	44.4%
Misisi	38.7%	19.4%	22.6%	9.7%	67.7%
Heavy Industrial Area	27.8%	38.9%	11.1%	5.6%	55.6%
Overall	43.1%	33.3%	13.9%	9.7%	55.6%

111 世帯 : Q55 政府がすべき更なる支援活動（複数回答）

Q55 Necessary supports/assistance by the government to achieve such further actions.

	Delivering health	Food support for	Implementing health	Increasing the	Other financial	Sanitization and	Sensitizing and	Strengthening local
Chibolya	41.5%	57.3%	9.8%	8.5%	69.5%	34.1%	4.9%	1.2%
Kanyama	26.2%	38.1%	10.5%	18.0%	68.4%	17.3%	5.1%	3.1%
Misisi	21.9%	35.9%	15.6%	15.6%	57.8%	20.3%	9.4%	14.1%
Overall	28.4%	41.4%	11.1%	15.9%	67.0%	20.9%	5.7%	4.3%

112 事業所：Q49 政府がすべき更なる支援活動（複数回答）

Q49 Necessary supports/assistance by the government to achieve such further actions

	Access to roads	Drainage improvement	Efficient sewerage	Electricity power to	Land tenure normalization	Main road improvement	Safe and sufficient	Waste and garbage	Others
Chibolya	60.0%	60.0%	0.0%	40.0%	40.0%	20.0%	0.0%	0.0%	
Kanyama	33.3%	44.4%	33.3%	44.4%	11.1%	11.1%	22.2%	5.6%	
Misisi	35.5%	58.1%	22.6%	3.2%	25.8%	9.7%	9.7%	9.7%	
Heavy Industrial Area	22.2%	27.8%	16.7%	27.8%	33.3%	22.2%	5.6%	5.6%	
Overall	33.3%	47.2%	22.2%	22.2%	25.0%	13.9%	11.1%	6.9%	

113 FORM-5. 生活環境改善

114 コンパウンド・タウンシップでの環境改善のための優先度

115 世帯：Q56 近隣（コンパウンド）での生活環境改善の重要事項（複数回答）

Q56 Which type of improvement of living environment for your compound is the most important?

	Access to roads	Drainage improvement	Efficient sewerage	Electricity power to	Land tenure normalization	Main road improvement	Safe and sufficient	Waste and garbage	Others
Chibolya	36.6%	73.2%	9.8%	1.2%	12.2%	25.6%	24.4%	13.4%	0.0%
Kanyama	23.5%	76.9%	11.2%	3.1%	6.5%	22.8%	22.4%	25.5%	1.0%
Misisi	14.1%	59.4%	12.5%	6.3%	7.8%	18.8%	39.1%	26.6%	3.1%
Overall	24.5%	73.6%	11.1%	3.2%	7.7%	22.7%	25.2%	23.4%	1.1%

116 事業所：Q50 近隣（タウンシップ）での生活環境改善の重要事項（複数回答）

Q50 Which type of working improvement for your township is the most important?

	Access road improvement by pavement in front of my enterprise property	Drainage improvement avoiding inundation or flood	Efficient sewerage system to discharge waste water	Main road improvement by pavement in our compound	Safe and sufficient water supply service	Stable and enough electricity to each enterprise	Sufficient industrial waste and ordinal garbage collection
Chibolya	20.0%	60.0%	0.0%	0.0%	20.0%	0.0%	0.0%
Kanyama	5.6%	55.6%	5.6%	22.2%	0.0%	5.6%	5.6%
Misisi	16.1%	41.9%	6.5%	3.2%	22.6%	3.2%	3.2%
Heavy Industrial Area	5.6%	33.3%	11.1%	11.1%	22.2%	5.6%	11.1%
Overall	11.1%	44.4%	6.9%	9.7%	16.7%	4.2%	5.6%

117 世帯：Q57 個々の家への給水が難しい場合の第二の選択肢

Q57 If water supply to each house takes time or being difficult, which way will be the second best?

	Communal taps within 200 m range from your house	Reserve and use of natural water (rain water)	Water buying by the tank	Others	Total
Chibolya	73.2%	3.7%	22.0%	1.2%	100.0%
Kanyama	61.6%	3.4%	32.3%	2.7%	100.0%
Misisi	59.0%	14.8%	21.3%	4.9%	100.0%
Overall	63.4%	5.0%	28.8%	2.7%	100.0%

118 事業所：Q51 個々の事業所施設への給水が難しい場合の第二の選択肢

Q51 If water supply is not enough capacity for your business, which way by the second best?

	Another own borehole development to supply sufficient water from possible sites	Waiting for the water supply network development in the industrial township	Water buying by the tank from water companies	Others	Total
Chibolya	20.0%	20.0%	40.0%	20.0%	100.0%
Kanyama	22.2%	22.2%	55.6%	0.0%	100.0%
Misisi	29.0%	32.3%	32.3%	6.5%	100.0%
Heavy Industrial Area	38.9%	11.1%	50.0%	0.0%	100.0%
Overall	29.2%	23.6%	43.1%	4.2%	100.0%

119 世帯 : Q58 トイレがない家に設置ができない場合の第二の選択肢

Q58 If your house does not have toilets, which way will be the second best?

	I will wait for provision of own toilet until my personal fund is ready.	Safe and clean communal toilet (Flush toilet) within 200 m range from home	Sharing toilet by contributory construction among neighbors	Others	Total
Chibolya	26.8%	25.6%	47.6%	0.0%	100.0%
Kanyama	32.3%	13.3%	48.3%	6.1%	100.0%
Misisi	26.6%	20.3%	46.9%	6.3%	100.0%
Overall	30.5%	16.6%	48.0%	5.0%	100.0%

120 事業所 : Q52 トイレが施設内に設置ができない場合の第二の選択肢

Q52 If your enterprise does not have toilets, which way will be the second best?

	No need of toilet for employees in the property as utilizing other company toilets	Putting temporal toilets (box type) in association with collection services	Waiting for investing toilet until being enabled to have enough budget	Others	総計
Chibolya	0.0%	60.0%	20.0%	20.0%	100.0%
Kanyama	33.3%	38.9%	22.2%	5.6%	100.0%
Misisi	29.0%	41.9%	6.5%	22.6%	100.0%
Heavy Industrial Area	16.7%	66.7%	11.1%	5.6%	100.0%
総計	25.0%	48.6%	12.5%	13.9%	100.0%

121 世帯 : Q59 ゴミ収集が不十分な場合の第二の選択肢

Q59 If waste collection service is nothing not enough, which way will be the second best?

	I will dispose my wastes within my property or house completely	I will dump wastes continuously to outside of the house (road or site dumped)	If there is a private collection company for waste, I will ask them for collection, even if they charge them.	If there is communal dump site close to home, I will contribute to such collection.	Others	Total
Chibolya	13.4%	3.7%	19.5%	63.4%	0.00%	100.0%
Kanyama	11.6%	19.0%	35.0%	33.0%	1.36%	100.0%
Misisi	18.8%	37.5%	10.9%	32.8%	0.00%	100.0%
Overall	13.0%	18.9%	28.6%	38.6%	0.91%	100.0%

122 事業所：Q53 ゴミ収集が不十分な場合の第二の選択肢

Q53 If waste collection service is nothing or not enough, which way will be the second best?

	If there is a private collection company for waste, we will ask them for collection, even if they charge them.	We will dispose our wastes within our property completely	We will dump wastes by our car outside in the remote dumping site	Others	Total
Chibolya	100.0%	0.0%	0.0%	0.0%	100.0%
Kanyama	66.7%	22.2%	11.1%	0.0%	100.0%
Misisi	41.9%	32.3%	22.6%	3.2%	100.0%
Heavy Industrial Area	38.9%	38.9%	16.7%	5.6%	100.0%
Overall	51.4%	29.2%	16.7%	2.8%	100.0%

123 世帯：Q60 道路改善が自宅の移転を伴う場合の政府の対応への合意条件（複数

回答）

Q60 If a road improvement requires your house relocation, which type of government action will you follow?

	I do not want any changes of house (no-move)	If the government compensate enough, I can move to everywhere without a land and a house.	If the same scale of property is secured, I am OK to move a new place with sufficient urban services even if the location is far from here.	Others
Chibolya	34.1%	23.2%	9.8%	0.0%
Kanyama	19.0%	34.4%	26.2%	12.9%
Misisi	3.1%	40.6%	34.4%	12.5%
Overall	19.5%	33.2%	24.3%	10.5%

124 事業所：Q54 道路改善が自宅の移転を伴う場合の政府の対応への合意条件

Q54 If a road improvement requires your enterprise, which type of government action will you follow?

	If the government compensate enough, we can move to land available location where we will find	If the same scale of property is secured, we are OK to move a new place with sufficient urban services even if the location is far from here	We do not want any changes of enterprise property and location (no-move)	Others	Total
Chibolya	20.0%	60.0%	20.0%	0.0%	100.0%
Kanyama	27.8%	55.6%	11.1%	5.6%	100.0%
Misisi	35.5%	29.0%	29.0%	6.5%	100.0%
Heavy Industrial Area	11.1%	33.3%	44.4%	11.1%	100.0%
Overall	26.4%	38.9%	27.8%	6.9%	100.0%

125 世帯 : Q61 不動産所有を確実にする方策（複数回答）

Q61 What could be done to secure your property?

	I will do nothing and keep as it is, because I live outside of this compound.	I will take gradual process toward getting registration of the title to live here.	I would like to move here to another place while I will rent this house to others	If the property is secured, even if it becomes smaller, I want a organized land plot with utilities immediately.	Others
Chibolya	3.7%	58.5%	18.3%	22.0%	26.8%
Kanyama	4.4%	44.2%	18.4%	27.6%	32.0%
Misisi	17.2%	34.4%	35.9%	35.9%	12.5%
Overall	6.1%	45.5%	20.9%	27.7%	28.2%

126 事業所 : Q55 事業所等の土地所有を正常化するためにどのような改善方策をとるべきか

Q55 Which way of improvement for land tenure to normalize it for your enterprise property?

	If the property is secured, even if it becomes smaller, we want an organized land plot with sufficient utilities immediately.	No need process because we have the title registered.	We will take gradual process toward getting registration of the title to live here.	Others	Total
Chibolya	60.0%	20.0%	20.0%	0.0%	100.0%
Kanyama	50.0%	11.1%	16.7%	22.2%	100.0%
Misisi	32.3%	22.6%	25.8%	19.4%	100.0%
Heavy Industrial Area	16.7%	38.9%	27.8%	16.7%	100.0%
Overall	34.7%	23.6%	23.6%	18.1%	100.0%

127 調查票

FORM-0. FOR SURVEYOR / INTERVIEWER (Common for Residential Household/Enterprise)

1. Name of person in charge of this survey sheet

- 1-1 Name of Interviewer (Encoder)
- 1-2 Name of Supervisor
- 1-3 Area Officer / Coordinator

2. Survey Date

- 2-1 Date / Month / Year

3. Survey Control Information

- 3-1 Name of Ward
- 3-2 Name of Township
- 3-3 Serial number of Respondent (HH)
- 3-4 Location captured by GPS for a respondent

FORM-1. PROFILE (residential household)

Q3.1 Name of the owner of the house (Landlord)

Q3.2 Name of head of household (renter, if a landlord living outside)

Q4 Sex

- 1 Male
- 2 Female

Q5 Age

- 1 18~25
- 2 26~30
- 3 31~35
- 4 36~40
- 5 41~45
- 6 46~50
- 7 51~55
- 8 55 over

Q6 Highest level of education

- 1 none (No formal education)
- 2 Primary (Grade 1-7 not completed)
- 3 Primary (Completed Grade 7)
- 4 Secondary (Grade 8-12 not completed)
- 5 Secondary (Grade 8-12 completed)
- 6 College or higher (not completed)
- 7 College or higher (not completed)

Q7. Number of household member living together (Including yourself)

- 1 1~3
- 2 4~5
- 3 6~8
- 4 8 over

Q8 Income Bracket (zmw)

- 1 under 500
- 2 500~999
- 3 1000~2499
- 4 2500~4999
- 5 5000~10000
- 6 above 10000

Q9 Occupation

- 1 paid employment
- 2 running a business
- 3 part-time
- 4 multiple (1~3)
- 5 not employment
- 6 Retired

Q10 Working place

- 1 same township
- 2 neighboring township
- 3 within the city
- 4 outside of the city

FORM-1. PROFILE -continued-

Q11 Land tenure

- | | | | |
|--------------------------|---------------------------|--------------------------|----------------------|
| 1 Certificate Title (CT) | 2 Occupancy License (OCL) | 3 Land Card Record (LCR) | 4 Under registration |
| 5 Renting | 6 Others | | |

Q12 Type of building

- | | | | |
|------------------------------|--------------------------|------------------------|----------|
| 1 Traditional hut (mud/wood) | 2 Concrete block masonry | 3 Steel/concrete frame | 4 Others |
|------------------------------|--------------------------|------------------------|----------|

Q15 Use of building

- | | | | |
|---------------|---------------------------------|------------------------------|----------|
| 1 Residential | 2 Shop/business/restaurant, etc | 3 Factory/storage/laboratory | 4 Others |
|---------------|---------------------------------|------------------------------|----------|

Q16 Electricity

- | | |
|-------|------|
| 1 Yes | 2 No |
|-------|------|

Q17 Main source of drinking water

- | | | | |
|--------------------------------|--------------------------------|---------------------------------------|------------------|
| 1 Piped water (tap water-LWSC) | 2 Shallow well in the property | 3 Water kiosk outside of the property | 4 Portable water |
| 5 Natural water source | 6 Combination (2-4) | | |

Q18 Topwater availability

- | | | | |
|-------------------------------|-----------------------|-----------------------------|-----------------------------|
| 1 Whole day (24hrs) available | 2 Around 70% (17 hrs) | 3 Around half day (am7-pm7) | 4 Around quarter day (6hrs) |
| 5 Only 1~2 hrs | 6 No Topwater | | |

Q19 All water consumption in a day

- | | | | |
|--|---------------------------|-----------------------------|--------------|
| 1 under 20 liter in a day (10 pet bottles) | 2 20 ~ 99 L (20 pet-btls) | 3 100 ~ 199 L (40 pet-btls) | 4 over 200 L |
|--|---------------------------|-----------------------------|--------------|

Q20 Cost of all water consumption in a day

- | | | | |
|----------------------|-----------------------|----------------------|-------------|
| 1 50 ngwee | 2 1 Kwacha | 3 1 Kwacha 50 ngwee | 4 2 Kwacha |
| 5 2 Kwacha 50 ngwee | 6 3 Kwacha | 7. 3 Kwacha 50 ngwee | 8. 4 Kwacha |
| 9. 4 Kwacha 50 ngwee | 10 5 Kwacha and above | | |

Q21 Key way of discharge of waste water/liquid waste

- | | | | |
|--------------------|--|-----------------------------------|------------------------------|
| 1 To sewerage pipe | 2 To garden/open space in the property | 3 To holding pond in the property | 4 To outside of the property |
| 5 To Drainage | 6 To Ditch | | |

Q22 Type of Toilet in your own property

- | | | | |
|----------------------|---|----------------------|----------------|
| 1 Simple pit latrine | 2 Ventilated Improved Pit latrine (VIP) | 3 Pour flush latrine | 4 Flash toilet |
|----------------------|---|----------------------|----------------|

Q23 Daily key activity for solid waste disposal

- | | | | |
|--|---|--|--------------------------------------|
| 1 Collected by service companies | 2 Burning solid waste inside the property | 3 Dumping and burying to pit in the property | 4 Dumping to outside of the property |
| 5 Burning solid waste outside the property | | | |

FORM-2. LIVING ENVIRONMENTAL CONDITIONS (residential household)

Q24 Major mode for daily trip

- | | | | |
|-------------------------|-----------------------|----------------------------|--------------------|
| 1 Walk / On-foot | 2 Bicycle / Motorbike | 3 Self-owned Vehicle / Car | 4 Taxi or Paid Car |
| 5 Public Bus / Mini-bus | | | |

Q25 Use frequency of public transportation

- | | | | |
|-------------|------------------------|-------------------------|------------------------|
| 1 never | 2 once~twice in a year | 3 once~twice in a month | 4 once~twice in a week |
| 5 every day | | | |

Q26 Daily trip range (distance)

- | | | | |
|------------------|--|----------------------------------|-----------------------------|
| 1 almost no trip | 2 neighboring area (within 50m radius) | 3 township (within 500 m radius) | 4 City wide (within 1~5 km) |
| 5 More than 5 km | | 5. | |

Q27 Conditions of access road

- | | | |
|--|--|---------------------------------|
| 1 very bad condition by bumping surface and narrow | 2 no pavement but acceptable surface and width | 3 good pavement and wide enough |
|--|--|---------------------------------|

Q28 Traffic accident in neighboring roads by responder or hearsay

- | | | |
|--|--|---|
| 1 never including hearsay in neighboring roads | 2 once~twice in several years past including hearsay | 3 many times, in past years including hearsay |
|--|--|---|

Q29 Type of necessary improvement of neighboring roads (multiple mention)

- | | | | |
|-----------------------------------|-----------------------------|------------------------|---|
| 1 surface improvement by pavement | 2 widening road | 3 drainage improvement | 4 traffic control avoiding traffic congestion |
| 5 public transportation | 6 Construction of new roads | 7 No improvement | |

Q30 Inundation or flood frequency in your house

- | | | | |
|---------|---|------------------------|--------------------------------|
| 1 never | 2 once~twice in several years' interval | 3 once~twice in a year | 4 once~twice in several months |
|---------|---|------------------------|--------------------------------|

Q31 What is the height of water by inundation or flood in case of inundation

- | | | | |
|---------------------------------------|--------------------|-----------------------------|----------------------|
| 1 covering ground floor (under 30 cm) | 2 water up to knee | 3 water up to one (1) meter | 4 over one (1) meter |
|---------------------------------------|--------------------|-----------------------------|----------------------|

Q32 Dominant length of day for continuous inundation / flood until discharging water completely

- | | | | |
|------------------|------------|------------|-----------------|
| 1 within one day | 2 2~3 days | 3 one week | 4 over one week |
|------------------|------------|------------|-----------------|

Q33 Past public responses to inundation or flood in surroundings of your house

- | | | | |
|-------------------------|-----------------------------|---|----------|
| 1 no action or response | 2 discharging water by pump | 3 cleaning and sanitizing inundation area | 4 others |
|-------------------------|-----------------------------|---|----------|

FORM-3. SANITARY AND HYGIENE (residential household)

Q34 Perceived water quality of main source of water before treatment

- | | | | |
|------------|-------|---------------------------------|---|
| 1 Very bad | 2 Bad | 3 Acceptable but with treatment | 4 Acceptable enabling to drink directly |
|------------|-------|---------------------------------|---|

Q35 Have you ever suffered by any communicable diseases caused by its main source water

- | | | | |
|---------------------|---|---|----------------------------|
| 1 Never ever before | 2 No but hearsay somebody neighboring area or my township | 3 Yes, but few times within five years before | 4 Yes, frequently suffered |
|---------------------|---|---|----------------------------|

Q36 Daily treatment for drinking water

- | | | |
|--|-------------------------------|-------------------|
| 1 Nothing and drinking or using the source of water directly | 2 Boiling the source of water | 3 Other treatment |
|--|-------------------------------|-------------------|

FORM-3. SANITARY AND HYGIENE -continued-

Q37 Sharing the use of toilet of your property with other household member

- 1 No only for family members 2 Yes sharing with other household

Q38 Daily treatment of feces/excretory in case of no toilet in the property

- 1 To sewerage 2 To garden/open space in the property 3 To holding pond in the property 4 To outside of the property
- 5 To Drainage 6 To Ditch

Q39 Daily way of handwashing after defecating

- 1 Nothing to do as it is 2 Washing hands by water only 3 Washing hands by water with soap 4 Washing hands by water with sanitizer

Q40 How to do daily handwash

- 1 No handwash without water use 2 Sometimes due to insufficient water use 3 Frequently after some works by hands

Q41 Type of disease experienced in family within current 5 years (multiple mention)

- 1 Nobody in family suffered by diseases before 2 Suffered by malaria 3 Suffered by cholera 4 Suffered by dysentery
- 5 Suffered by hepatitis-A 6 Suffered by typhoid 7 Others

Q42 Type of cause in the property for experienced diseases

- 1 I did not know the cause 2 Caused by poor drainage system (inundation and/or flood) 3 Caused by contamination of drinking water (poor waste water treatment and/or solid waste collection system) 4 Others

Q43 Hearsay of communicable diseases in the community or township in the past (5Ys)

- 1 Never ever before 2 Member of community by one or two times in five years 3 There were many infected people in the five years past

Q44 Things you can improve sanitary and hygiene conditions by yourself in your house (multiple mention)

- 1 Nothing because of no information by how to do responses 2 Nothing because of busy conditions with our own life even know 3 Limited activities and behavior changes (mask, hand-wash) 4 Daily activities complying with Government Instruction

Q45 Priority request to improve sanitary and hygiene conditions your community (multiple mention)

- 1 Dissemination or sensitization about communicable diseases 2 Deliver necessary protection kit to the community 3 Improve garbage collection and sanitization in public spaces 4 Improve drainage system to mitigate inundation / flood
- 5 Develop or improve clean water supply system 6 Others

FORM-4. COVID 19 IMPACTS AND RESPOSE (residential household)

Q46 What is COVID 19

- | | | | | | | | |
|---|------------------------|---|---|---|---|---|---|
| 1 | I do not know about it | 2 | Only name as one of Cold Viruses but nothing about in details | 3 | Knowing the risks in general but a few knowledges of response | 4 | Knowing the risks and necessary responses to COVID 19 |
|---|------------------------|---|---|---|---|---|---|

Q47 Understanding COVID 19 impacts and necessary responses to be prevented

- | | | | | | | | |
|---|--|---|--|---|---|---|---|
| 1 | I do not know anything about the impacts and necessary responses | 2 | I know impacts and necessary actions by community's campaign | 3 | I know impacts and necessary actions by the government campaign | 4 | I know impacts and necessary responses through media (TV, etc.) |
|---|--|---|--|---|---|---|---|

Q48 The most affected negative impacts on financial condition and earnings (multiple choice)

- | | | | | | | | |
|---|---|---|---------------------------|---|--|---|--|
| 1 | Loss of regular earning job / business completely | 2 | Regular earning decreased | 3 | Increasing loan / borrowing money from others for daily life | 4 | Losing or decreasing most of the savings |
|---|---|---|---------------------------|---|--|---|--|

Q49 Dominant change on daily life by COVID 19 pandemic (multiple choice)

- | | | | | | | | |
|---|--|---|-------------------------|---|---|---|--|
| 1 | Nothing changed to keep daily life and secure livelihood | 2 | Increasing stay-at-home | 3 | Careful behavior to keep good hygiene in home | 4 | Avoiding public gathering places (terminal, market, shopping places) |
| 5 | Losing earnings and less daily food to live | | | | | | |

Q50 What kinds of negative impact on health care condition or opportunity (multiple choice)

- | | | | | | | | |
|---|--|---|---|---|--|---|--|
| 1 | Nothing changed because of no access to take health care | 2 | Increasing cost for health care of household including medicine | 3 | Over capacity due to chronic disease to cope with COVID 19 | 4 | Increasing difficulties to access to health care service |
|---|--|---|---|---|--|---|--|

Q51 Responses you are taking daily to prevent COVID 19 infection (multiple choice)

- | | | | | | | | |
|---|--------------------------|---|----------------------|---|--|---|---|
| 1 | Nothing | 2 | Handwash daily | 3 | Stay-at-home daily avoiding non-essential travel | 4 | Keep 1-2 meters away from others in public places |
| 5 | Avoid hand shaking daily | 5 | With face mask daily | | | | |

Q52 Reason of responses which you cannot do (multiple choice)

- | | | | | | | | |
|---|--|---|--|---|--|---|---|
| 1 | Not enough water source to wash hands and dishes to keep clean daily | 2 | Not enough space to keep daily distance avoiding COVID19 infection | 3 | Not enough financial capacity to buy health hygiene care goods | 4 | No financial capacity without daily earnings to do stay-at-home |
| 5 | No appropriate guide and instruction to prevent COVID19 infection | 6 | Others | | | | |

Q53 Responses your community (township/Ward) are taking now to prevent COVID 19 pandemic (multiple choice)

- | | | | | | | | |
|---|-------------------------|---|--|---|--|---|--|
| 1 | Not specific activities | 2 | Campaign activity to promote appropriate response by community | 3 | Sanitazation public spaces periodically in the community | 4 | Delivering personal health goods (face mask, sanitizer, etc) |
|---|-------------------------|---|--|---|--|---|--|

Q54 Further necessary individual actions/behavior to prevent COVID 19 infection (multiple choice)

- | | | | | | | | |
|---|--|---|---|---|--|---|--|
| 1 | Nothing to be able to do things further | 2 | Performing faithfully activities or behavior instructed by the government | 3 | Avoiding gathering including religious events from causal clustering infection | 4 | Avoiding public gathering places (terminal, market, shopping places) |
| 5 | Participating events to learn necessary responses to COVID19 infection | | | | | | |

FORM-5. LIVING ENVIRONMENTAL IMPROVEMENT (residential household)

Q55 Necessary supports/assistance by the government to achieve such further actions (multiple choice)

- | | | | |
|--|---|---|--|
| 1 Food support for household losing earnings due to COVID19 pandemic | 2 Other financial supports to maintain livelihood | 3 Sanitization public spaces periodically in the community | 4 Delivering health goods (face mask, sanitizer, etc) for each household |
| 5 Implementing health care (e.g. PCR testing, vaccination) | 6 Increasing the capacity of health care facilities for medical examination | 7 Strong lockdowns and restrictions on movement for the community or the city | 8 Sensitizing program to deepen understanding COVID19 response |

Q56 Which type of improvement of living environment for your compound is the most important? (multiple choice)

- | | | | |
|--|--|---|--|
| 1 Safe and sufficient water supply service | 2 Efficient sewerage system to discharge waste water | 3 Drainage improvement avoiding inundation or flood | 4 Land tenure normalization (giving a title of registration) |
| 5 Access road improvement by pavement in front of my house | 6 Main road improvement by pavement in our compound | 7 Electricity power to each household | 8 Waste and garbage collection |
| 9 Others | | | |

Q57 If water supply to each house takes time or being difficult, which way will be the second best? Multiple mention

- | | | | |
|--|----------------------------|---|----------|
| 1 Communal taps within 200 m range from your house | 2 Water buying by the tank | 3 Reserve and use of natural water (rain water) | 4 Others |
|--|----------------------------|---|----------|

Q58 If your house does not have toilets, which way will be the second best?

- | | | | |
|--|---|--|----------|
| 1 I will wait for provision of own toilet until my personal fund is ready. | 2 Sharing toilet by contributory construction among neighbors | 3 Safe and clean communal toilet (flush toilet) within 200 m range from the home | 4 Others |
|--|---|--|----------|

Q59 If waste collection service is nothing not enough, which way will be the second best?

- | | | | |
|---|---|--|---|
| 1 I will dump wastes continuously to outside of the house (road or site dumped) | 2 I will dispose my wastes within my property or house completely | 3 If there is communal dump site close to home, I will contribute to such collection | 4 If there is a private collection company for waste, I will ask them for collection, even if they charge them. |
| 5 Others | | | |

Q60 If a road improvement requires your house relocation, which type of government action will you follow? (multiple choice)

- | | | | |
|---|--|--|--|
| 1 I do not want any changes of house (no-move) | 2 If the same scale of property is secured, I am OK to move a new place with sufficient urban services even if the location is far from here | 3 If my home is secured in close to here, I am OK to move a new multi-story building with floor property right | 4 If my home is secured in close to here, I am OK to move a new multi-story building as I am renting the house |
| 5 If the government compensate enough, I can move to everywhere without a land and a house. | 6 Others | | |

Q61 What could be done to secure your property? (multiple choice)

- | | | | |
|---|---|--|--|
| 1 I will do nothing and keep as it is, because I live outside of this compound. | 2 I would like to move here to another place while I will rent this house to others | 3 I will take gradual process toward getting registration of the title to live here. | 4 If the property is secured, even if it becomes smaller, I want a organized land plot with utilities immediately. |
| 5 Others | | | |

Q62 How long have you been living in this community/compound?

- | | |
|---------------------|---------------------|
| 1 Less than 5 years | 2 More than 5 years |
|---------------------|---------------------|

FORM-1. PROFILE (enterprise)

Q1. Location, Q2 Number of Census Enumeration

Q3.Name of head of enterprise

Q4 Sex

- 1 Male 2 Female

Q5 Age

- 1 under 20 2 20~29 3 30~39 4 40~49
5 50~60 6 over 60

Q6 Highest level of education

- 1 none (No formal education) 2 Primary (Grade 1-7 not completed) 3 Primary (Completed Grade 7) 4 Secondary (Grade 8-12 not completed)
5 Secondary (Grade 8-12 completed) 6 College or higher (not completed) 7 College or higher (Completed)

Q7 Number of full-time workers employed

- 1 under 5 (very small) 2 5~19 (small) 3 20~99 (medium) 4 over 100 (large)

Q8 Major economic activities of your enterprise

- 1 Manufacturing 2 Construction 3 Wholesale trade 4 Retail trade
5 Business services 6 Others

Q9 Dominant living place of full-time workers

- 1 same township 2 neighboring township 3 within the city 4 outside of the city

Q10 Land tenure

- 1 Certificate Title (CT) 2 Occupancy License (OCL) 3 Land Card Record (LCR) 4 Under registration
5 Renting 6 Others

Q11 Property area of the enterprise

- 1 under 0.5 ha 2 0.5 - 0.9 ha 3 1.0 - 4.9 ha 4 over 5.0 ha

Q12 Dominant type of building structure

- 1 Concrete block masonry 2 Steel frame 3 Reinforced concrete frame 4 others

Q13 Electricity

- 1 Yes 2 No

Q14 Main source of drinking water

- 1 Piped water (tap water-LWSC) 2 Shallow well in the property 3 Water kiosk outside of the property 4 Portable water
5 Natural water source 6 Combination (2-4)

Q15 Tap water availability in a day

- 1 Whole day (24hrs) available 2 Around 70% (17 hrs) 3 Around half day (am7-pm7) 4 Around quarter day (6hrs)
5 Only 1~2 hrs

Q16 Drinking water consumption per day (liter) except industrial water use

- 1 under 50 liter in a day 2 50 ~ 249 L 3 250 ~ 999 L 4 over 1000 L

FORM-1. PROFILE -continued-

Q17 Way of discharge of waste water and liquid waste

- | | | | |
|--------------------|--|-----------------------------------|------------------------------|
| 1 To sewerage pipe | 2 To garden/open space in the property | 3 To holding pond in the property | 4 To outside of the property |
| 5 To Drainage | 6 To Ditch | | |

Q18 Type of Toilet in your own property

- | | | | |
|----------------------|---|----------------------|----------------|
| 1 Simple pit latrine | 2 Ventilated Improved Pit latrine (VIP) | 3 Pour flush latrine | 4 Flash toilet |
|----------------------|---|----------------------|----------------|

Q19 Daily activity for solid waste disposal

- | | | | |
|--|---|--|--------------------------------------|
| 1 Collected by service companies | 2 Burning solid waste inside the property | 3 Dumping and burying to pit in the property | 4 Dumping to outside of the property |
| 5 Burning solid waste outside the property | | | |

FORM-2. LIVING ENVIRONMENTAL CONDITIONS (enterprise)

Q20 Major daily commuting mode by full-time workers (Single mention)

- | | | | |
|-------------------------|-----------------------|----------------------------|--------------------|
| 1 Walk / On-foot | 2 Bicycle / Motorbike | 3 Self-owned Vehicle / Car | 4 Taxi or Paid Car |
| 5 Public Bus / Mini-bus | | | |

Q21 Use frequency of public transportation for workers

- | | | | |
|-------------|------------------------|-------------------------|------------------------|
| 1 never | 2 once~twice in a year | 3 once~twice in a month | 4 once~twice in a week |
| 5 every day | | | |

Q22 Dominant daily business vehicle mode

- | | | | |
|------------------|----------------------|--|--|
| 1 standard sedan | 2 pickup truck / van | 3 standard truck (around 10 freight tonnage) | 4 semi-trailer truck / heavy truck (28 ft - 36 ft) |
|------------------|----------------------|--|--|

Q23 Dominant physical conditions of access road

- | | | |
|--|--|---------------------------------|
| 1 very bad condition by bumping surface and narrow | 2 no pavement but acceptable surface and width | 3 good pavement and wide enough |
|--|--|---------------------------------|

Q24 Priority improvement or development of trunk/arterial roads to your enterprise

- | | | | |
|---|---|---|--|
| 1 surface improvement by pavement on the existing roads | 2 widening roads in your surroundings of the property | 3 drainage improvement in your surroundings of the property | 4 traffic control avoiding traffic congestion in your surroundings |
| 5 trunk / arterial roads close to our business block | 6 others | | |

Q25 Inundation or flood frequency in your property

- | | | | |
|---------|--|------------------------|--------------------------------|
| 1 never | 2 once twice in several years interval | 3 once~twice in a year | 4 once~twice in several months |
|---------|--|------------------------|--------------------------------|

Q26 Frequently occurred height of water by inundation or flood in case of inundation

- | | | | |
|---------------------------------------|--------------------|-----------------------------|----------------------|
| 1 covering ground floor (under 30 cm) | 2 water up to knee | 3 water up to one (1) meter | 4 over one (1) meter |
|---------------------------------------|--------------------|-----------------------------|----------------------|

Q27 Dominant length of day for continuous inundation / flood until being discharged completely

- | | | | |
|------------------|------------|------------|-----------------|
| 1 within one day | 2 2~3 days | 3 one week | 4 over one week |
|------------------|------------|------------|-----------------|

Q28 Past public responses to inundation or flood in surroundings of your house

- | | | | |
|-------------------------|-----------------------------|--|----------|
| 1 no action or response | 2 discharging water by pump | 3 cleansing and sanitizing inundation area | 4 others |
|-------------------------|-----------------------------|--|----------|

FORM-2. LIVING ENVIRONMENTAL CONDITIONS -continued-

Q28 Past public responses to inundation or flood in surroundings of your house

- | | | | |
|-------------------------|-----------------------------|--|----------|
| 1 no action or response | 2 discharging water by pump | 3 cleansing and sanitizing inundation area | 4 others |
|-------------------------|-----------------------------|--|----------|

FORM-3. SANITARY AND HYGIENE (enterprise)

Q29 Perceived water quality of main source of water before treatment

- | | | | |
|------------|-------|---------------------------------|---|
| 1 Very bad | 2 Bad | 3 Acceptable but with treatment | 4 Acceptable enabling to drink directly |
|------------|-------|---------------------------------|---|

Q30 Have you ever suffered by any communicable diseases caused by its main source water?

- | | | | |
|---------------------|---|---|----------------------------|
| 1 Never ever before | 2 No but hearsay somebody neighboring area or my township | 3 Yes, but few times within five years before | 4 Yes, frequently suffered |
|---------------------|---|---|----------------------------|

Q31 Daily treatment for drinking water

- | | | |
|--|-------------------------------|-------------------|
| 1 Nothing and drinking or using the source of water directly | 2 Boiling the source of water | 3 Other treatment |
|--|-------------------------------|-------------------|

Q32 Daily treatment of feces/excretory in case of no toilet in the property

- | | | | |
|---------------|--|-----------------------------------|------------------------------|
| 1 To sewerage | 2 To garden/open space in the property | 3 To holding pond in the property | 4 To outside of the property |
|---------------|--|-----------------------------------|------------------------------|

Q33 Daily way of handwashing after defecating

- | | | | |
|--------------------------|-------------------------------|------------------------------------|---|
| 1 Nothing to do as it is | 2 Washing hands by water only | 3 Washing hands by water with soap | 4 Washing hands by water with sanitizer |
|--------------------------|-------------------------------|------------------------------------|---|

Q34 How to do daily handwash

- | | | |
|---------------------------------|---|--|
| 1 No handwash without water use | 2 Sometimes due to insufficient water use | 3 Frequently after some works by hands |
|---------------------------------|---|--|

Q35 Past experience (past 5 years) of communicable diseases among full-time employees? (multiple choice)

- | | | | |
|--|-----------------------|-----------------------|-------------------------|
| 1 Nobody in family suffered by diseases before | 2 Suffered by malaria | 3 Suffered by cholera | 4 Suffered by dysentery |
| 5 Suffered by hepatitis-A | 6 Suffered by typhoid | 7 Others | |

Q36 Type of cause in the property for experienced diseases

- | | | | |
|----------------------------|--|---|----------|
| 1 I did not know the cause | 2 Caused by poor drainage system (inundation and/or flood) | 3 Caused by contamination of drinking water (poor waste water treatment and/or solid waste collection system) | 4 Others |
|----------------------------|--|---|----------|

Q37 Hearsay of communicable diseases in the industrial areas or township in the past (5Ys)

- | | | |
|---------------------|---|--|
| 1 Never ever before | 2 Member of community by one or two times in five years | 3 There were many infected people in the five years past |
|---------------------|---|--|

Q38 Things you can improve sanitary and hygiene conditions for workers in your enterprise

- | | | | |
|--|--|---|--|
| 1 Nothing because of no information by how to do responses | 2 Nothing because of busy conditions with our own life even know | 3 Limited activities and behavior changes (mask, hand-wash) | 4 Daily activities complying with Government Instruction |
|--|--|---|--|

Q39 Priority request to improve sanitary and hygiene conditions your business block (multiple response)

- | | | | |
|--|---|--|--|
| 1 Dissemination or sensitization about communicable diseases | 2 Deliver necessary protection kit to the community | 3 Improve garbage collection and sanitization in public spaces | 4 Improve drainage system to mitigate inundation / flood |
| 5 Develop or improve clean water supply system | 6 Others | | |

FORM-4. COVID 19 IMPACTS AND RESPOSE (enterprise)

Q40 What is COVID 19 (respondent only)

- | | | | |
|--------------------------|---|--|---|
| 1 I do not know about it | 2 Only name as one of Cold Viruses but nothing about in details | 3 Knowing the risks in general but a few knowledge of response | 4 Knowing the risks and necessary responses to COVID 19 |
|--------------------------|---|--|---|

Q41 Understanding COVID 19 impacts and necessary responses to be prevented

- | | | | |
|--|--|---|---|
| 1 I do not know anything about the impacts and necessary responses | 2 I know impacts and necessary actions by community's campaign | 3 I know impacts and necessary actions by the government campaign | 4 I know impacts and necessary responses through media (TV, etc.) |
|--|--|---|---|

Q42 The most affected negative impacts on financial condition and business earnings (multiple choice)

- | | | | |
|---------------------------------------|------------------------------|--|--|
| 1 Lost completely of regular earnings | 2 Regular earnings decreased | 3 Increasing loan / borrowing money from others for daily business | 4 Losing or decreasing most of the savings |
|---------------------------------------|------------------------------|--|--|

Q43 Dominant change on daily business by COVID 19 pandemic (multiple choice)

- | | | | |
|--|--|---------------------------------------|---|
| 1 Nothing changed to keep daily business | 2 Increasing suspension of operation due to worker's stay-at-home | 3 Being closed to business / shutdown | 4 No change but careful activities to keep good hygiene in the enterprise |
| 5 Avoiding works for gathering in the property | 6 Losing earnings and difficult to pay leave allowance or compensation for workers | | |

Q44 What kinds of negative impact on health care condition or opportunity (multiple choice)

- | | | | |
|--|---|--|--|
| 1 Nothing changed because of no access to take health care | 2 Increasing cost for health care of workers including medicine | 3 Over capacity due to chronic disease to cope with COVID 19 | 4 Increasing difficulties to access to health care service |
|--|---|--|--|

Q45 Responses you are taking daily to prevent COVID 19 infection (multiple choice)

- | | | | |
|----------------------------|------------------------|---|--|
| 1 Nothing | 2 Handwash daily | 3 Keep 1-2 meters away from others in working areas of the enterprise | 4 Stay-at-home daily avoiding non-essential travel |
| 5 Avoid hand shaking daily | 6 With face mask daily | | |

Q46 Reason of responses which your enterprise and workers cannot do (multiple choice)

- | | | | |
|--|--|--|---|
| 1 Not enough water source to wash hands and dishes to keep clean daily | 2 Not enough space to keep daily distance avoiding COVID19 infection | 3 Not enough financial capacity to buy health hygiene care goods | 4 No financial capacity without daily earnings to do stay-at-home |
| 5 No appropriate guide and instruction to prevent COVID19 infection | 6 Others | | |

Q47 Responses your business community (township/Ward) are taking now to prevent COVID 19 pandemic (multiple choice)

- | | | | |
|---------------------------|--|--|--|
| 1 Not specific activities | 2 Campaign activity to promote appropriate response by association | 3 Sanitization public spaces periodically in the business blocks | 4 Delivering personal health goods (face mask, sanitizer, etc) |
|---------------------------|--|--|--|

Q48 Further necessary actions/behavior by your company to prevent COVID 19 infection (multiple choice)

- | | | | |
|--|---|--|---|
| 1 Nothing to be able to do things further | 2 Performing faithfully activities or behavior instructed by the government | 3 Avoiding gathering style of works from causal clustering infection | 4 Increasing tele-business communication (web-meeting, telephone, remote works) |
| 5 Participating events to learn necessary responses to COVID19 infection | | | |

FORM-4. COVID 19 IMPACTS AND RESPOSE -continued-

Q49 Necessary supports/assistance by the government to achieve such further actions (multiple choice)

- | | | | |
|---|--|--|--|
| 1 Financial supports to maintain livelihood | 2 Sanitization public spaces periodically in the business urban block | 3 Delivering health goods (face mask, sanitizer, etc) for each household | 4 Implementing health care (e.g. PCR testing, vaccination) |
| 5 Increasing the capacity of health care facilities for medical examination | 6 Strong lockdowns and restrictions on movement for the business block or the city | 7 Sensitizing program to deepen understanding COVID19 response | |

FORM-5. LIVING ENVIRONMETAL IMPROVEMENT (enterprise)

Q50 Which type of improvement of working environment for your compound is the most important? (multiple choice)

- | | | | |
|---|--|--|--|
| 1 Safe and sufficient water supply service | 2 Efficient sewerage system to discharge waste water | 3 Drainage improvement avoiding inundation or flood | 4 Access road improvement by pavement in front of my enterprise property |
| 5 Main road improvement by pavement in our compound | 6 Stable and enough electricity to each enterprise | 7 Sufficient industrial waste and ordinal garbage collection | 8 Others |

Q51 If water supply is not enough capacity for your business, which way by the second best?

- | | | | |
|---|---|---|----------|
| 1 Another own borehole development to supply sufficient water from possible sites | 2 Water buying by the tank from water companies | 3 Waiting for the water supply network development in the industrial township | 4 Others |
|---|---|---|----------|

Q52 If your enterprise does not have toilets, which way will be the second best?

- | | | | |
|--|---|--|----------|
| 1 No need of toilet for employees in the property as utilizing other company toilets | 2 Putting temporal toilets (box type) in association with collection services | 3 Waiting for investing toilet until being enabled to have enough budget | 4 Others |
|--|---|--|----------|

Q53 If waste collection service is nothing or not enough, which way will be the second best?

- | | | | |
|--|---|--|----------|
| 1 We will dump wastes by our car to outside in the remote dumping site | 2 We will dispose our wastes within our property completely | 3 If there is a private collection company for waste, we will ask them for collection, even if they charge them. | 4 Others |
|--|---|--|----------|

Q54 If a road improvement requires your enterprise relocation, which type of government action will you follow?

- | | | | |
|--|--|--|----------|
| 1 We do not want any changes of enterprise property and location (no-move) | 2 If the same scale of property is secured, we are OK to move a new place with sufficient urban services even if the location is far from here | 3 If the government compensate enough, we can move to land available location where we will find | 4 Others |
|--|--|--|----------|

Q55 Which way of improvement for land tenure to normalize it for your enterprise property?

- | | | | |
|---|---|--|----------|
| 1 No need process because we have the title registered. | 2 We will take gradual process toward getting registration of the title to live here. | 3 If the property is secured, even if it becomes smaller, we want a organized land plot with sufficient utilities immediately. | 4 Others |
|---|---|--|----------|