



机械工业出版社
China Machine Press

F

F

F

30

n

F

F

F

n

F

CIP

/

. L

2009.8

ISBN 978-7-111-27482-7

. A - - . - -
. U239.5 F301.24

CIP

2009

109119

22

100037

2009 8 1 □ 1

170k k ¥242k k □8.75

ISBN 978-7-111-27482-7

38.00

n n

010 68326294

010 88379007



n “

” F

2001 1

4

n n 4

n 17

n n n

F

“

” F

“ ”

“ ”

nCBD n

F

F

n

F

n

n1

n

2

n

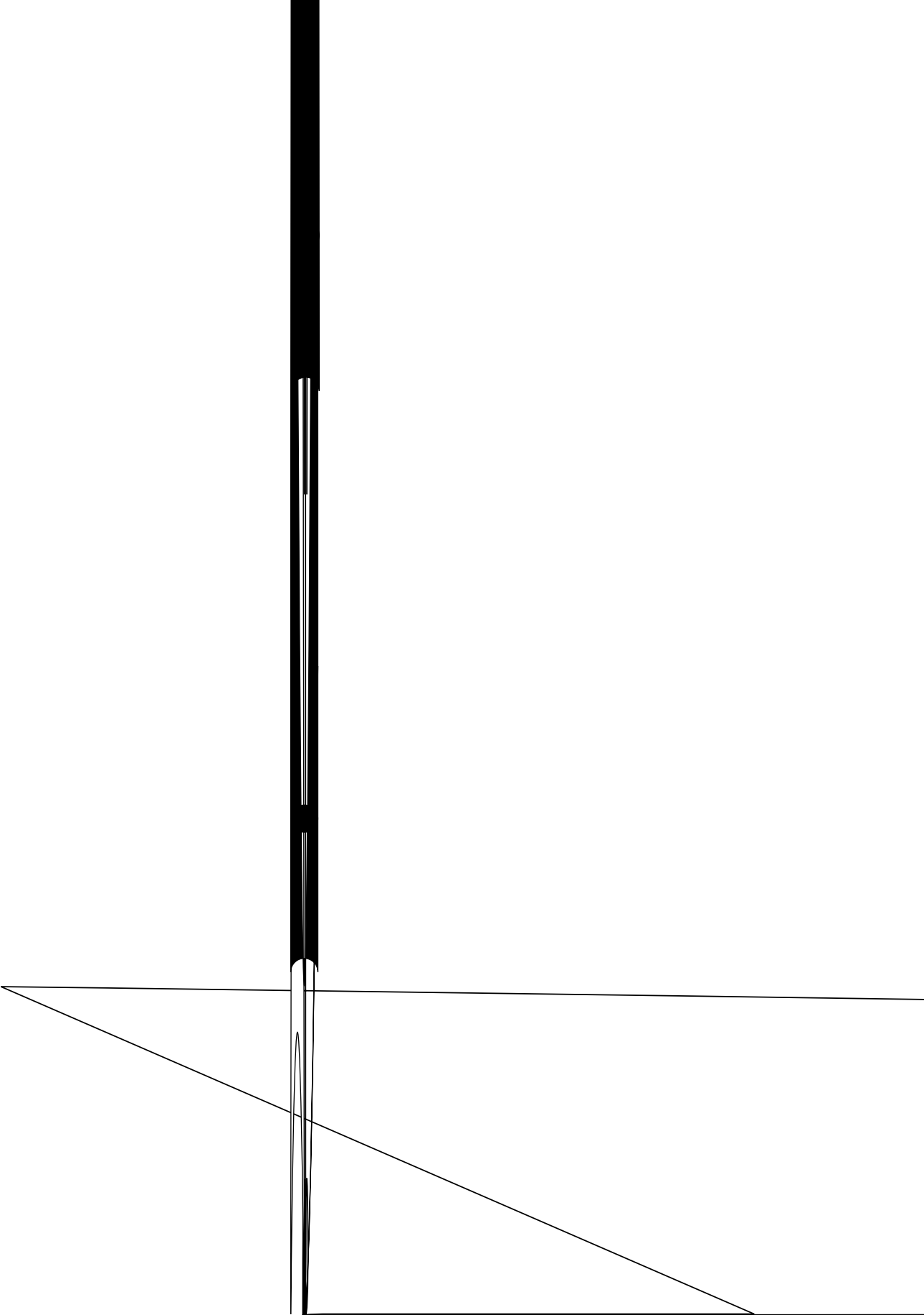
F

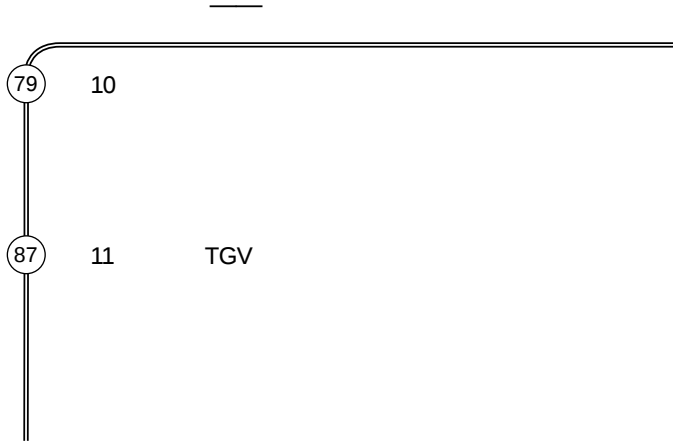
2009 7

目录

Contents

2	1	—
14	2	—
		“ ”
32	3	
39	4	





14

—

15

—



F

n

n

n

F

F

F

n

n

n

n

n

n

F

n

F

F



1



1.1

100

7000

1863

140

100

7000

£

30

£

£

..







Кмқаму К сrpm

н

Ұ

/

-

/

-

-

-

-

/

/

/

-

-





1.2	2015	2500							
		1965		1	1969	10		1971	
1				£					
				£					
	20	60							
		23.6		17	1969	10	1		£
		51							
		n	n						
				£					





F n 20 90 n

F

n n F

F





1997

n

3

1

£

2005

n

n

n

n

£

2015

2400

7000

2008

1000

£

n

n

n

n

n

n

£

1.3

n

£

£

n

£

£

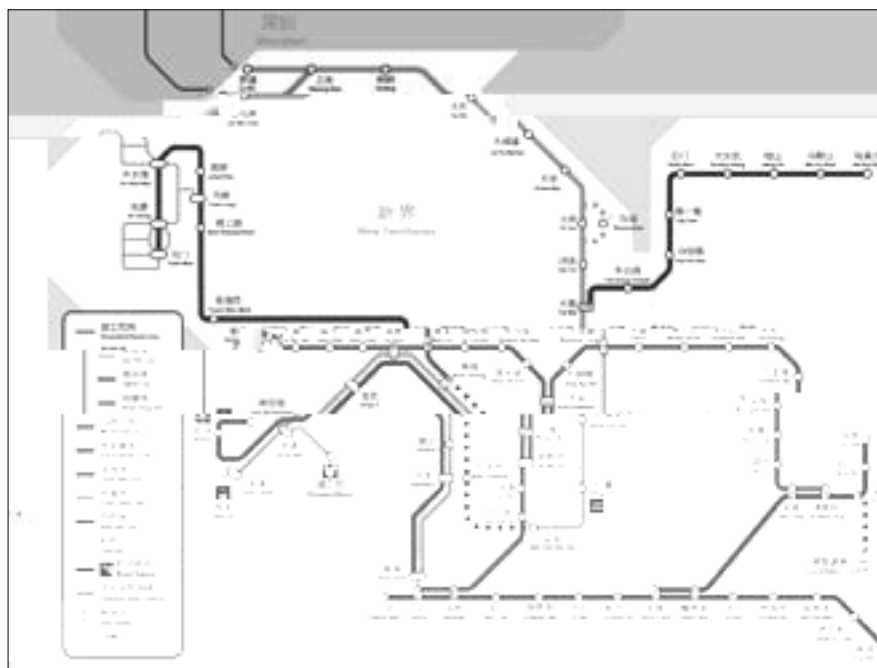
1.3.1

£

20

50

70





/

/

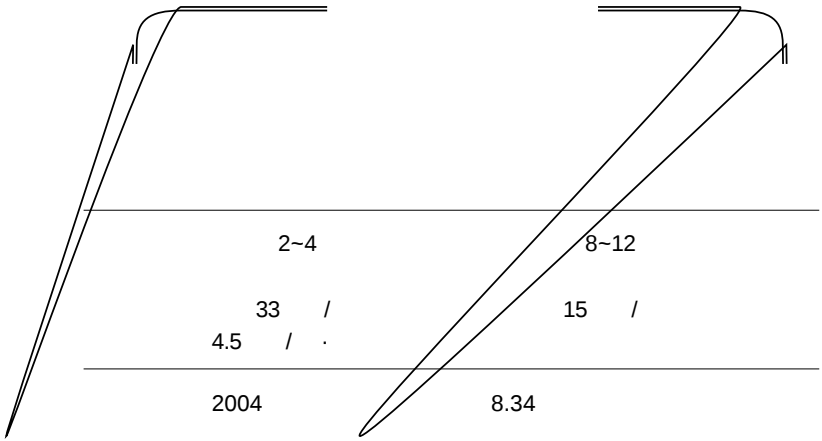
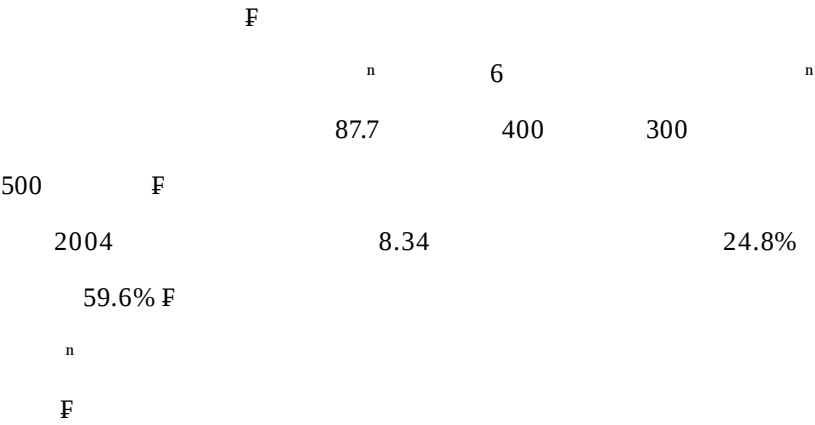
/

/



1.3.4 3/4

500



E E



2

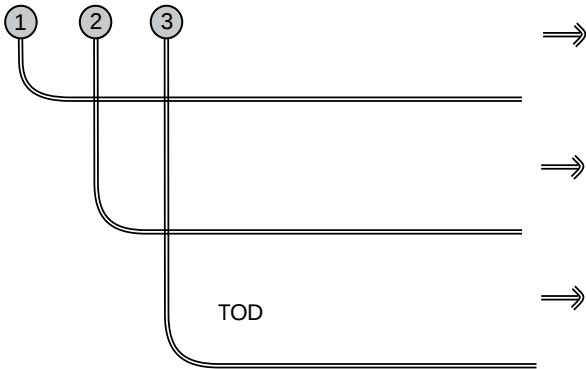


F

F

F

F



2.1

UIC

200

250

F

20

“

”

200

F

1964

“ ” 200 F
 n n F
 F
 F
 n
 F

• 500
 • 120 /
 •
 300~700
 • 40 000 30 000 70 000 2000~5000 5000~
 2.5~14
 •
 •
 • 5~10 ;
 •
 • 30 35
 1100
 • : 1
 1.3 1.5 8.8 9.8
 •
 •



ICT

n n n

F djcvgbjc aaas ksjargml

n n F

n

F n

F

“ ”

L L 2008

2012 F 350 21

7 5 2010 F

175 450 /

200 / F

F

F

2.2 “ ” “ ”

n n F



	£				Sfglialqcl	1964
	1975	1987	1998	4		5
2000	56	£				
	Papgg-Lmlbml	1995				
					33%	70%
40%		30%	27% £			
					£	
	/742					
/76/			RET			
	-	-			0.	7.
	-	-				





“ ”

2 1 RET

352,6 -

RET /77. 3 3/3,1 - /

RET 0. 6. RET

/

1..

0.. ŃŃ



0. 6 4 RET 10. /

0 0. 2 /



RET

/RET

ń RET 03. N

/1

4. . 27

L L RET /

RET

ń N / RET RET /50

17

/6 ŃŃRET

L L

/6.

2,4



2.3

n n n n

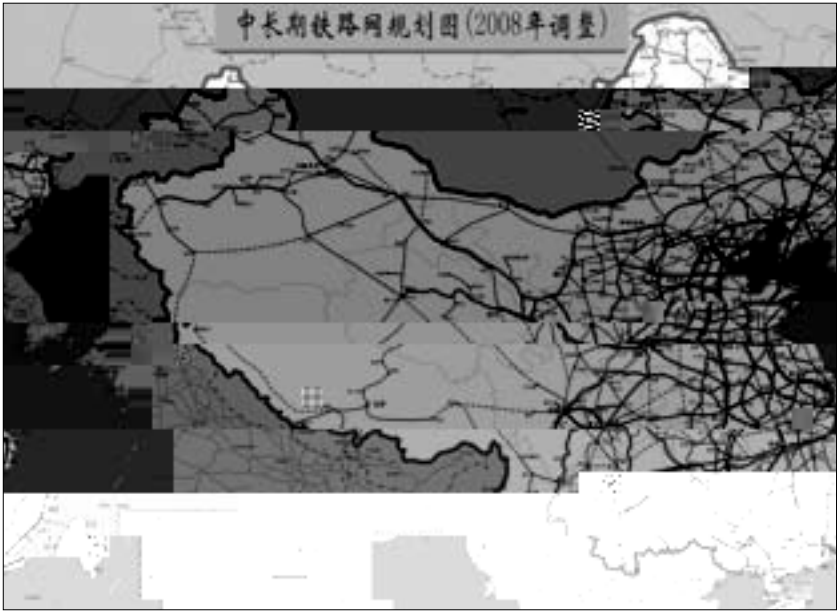
n F

2008

F 3 3.5 F“ ”

12 350 3|5

F



n n n n 250

n n n

n n n n



“ 1 1 2 ”

F

2.4 “ 2 ”

2.4.1

F

500 | 600

2 F

550

500 F 2

baw pcrspl

F

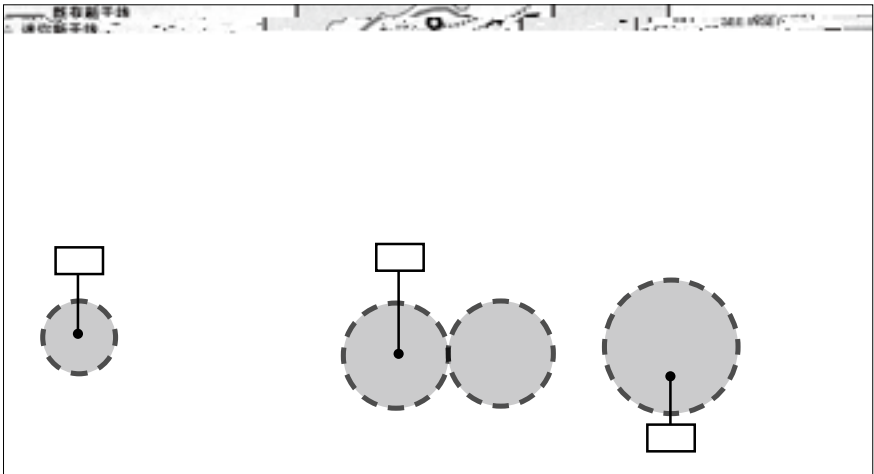
n

F

n

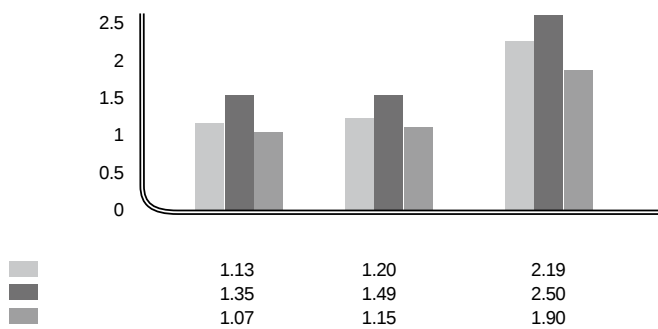
n

F

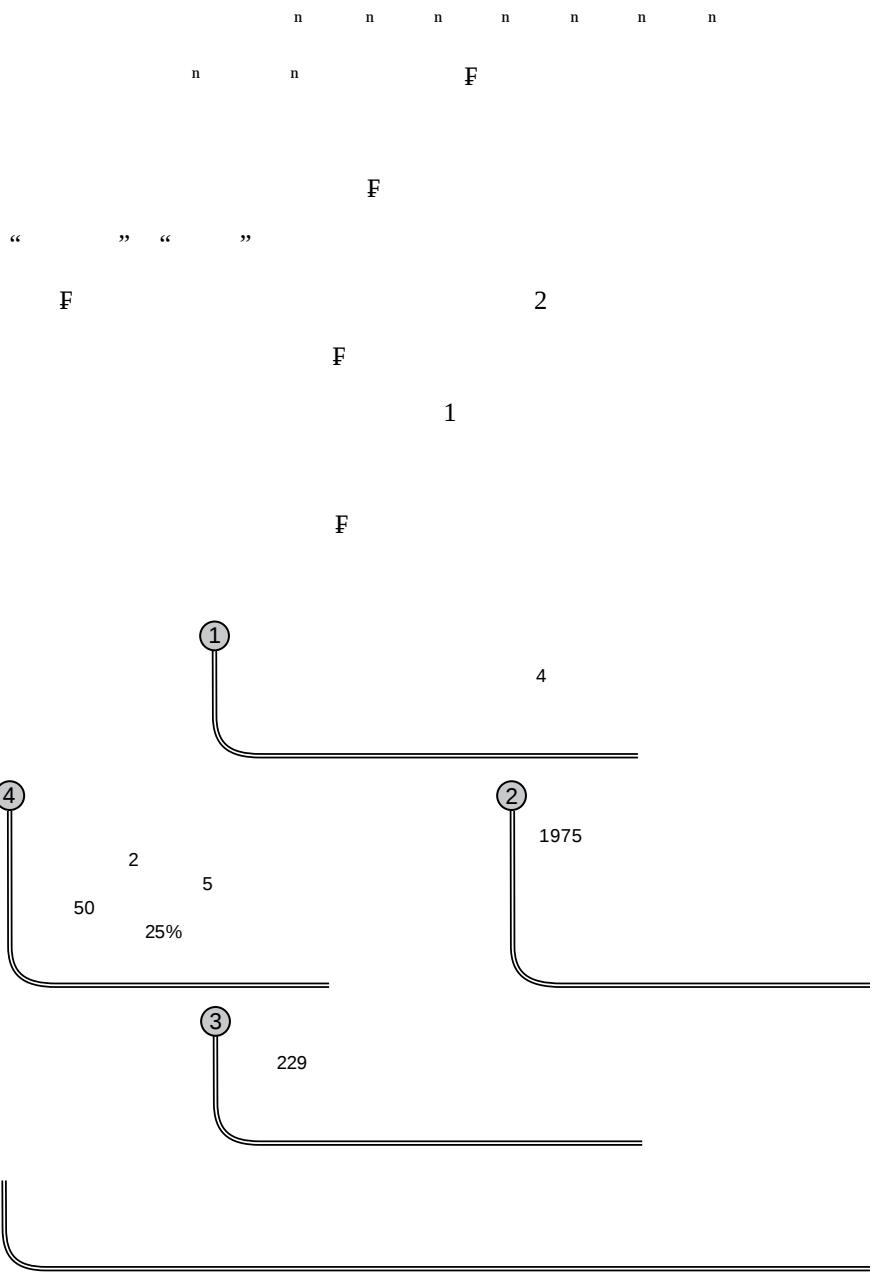




" 1 Z " " | ò U 11 ò U 5



2.4.2





13.

L

02



	£		Tniwm-Naemwa-Oqai a	Bpmrafgc	
1991					
22%	Hgpmra	1984		n	
		16% 34%	£	TGV	Vc1bmkc
	3		35%		a



2008	£	100
450	0.31	£

2.4.4

£



L L

F

F

F

F

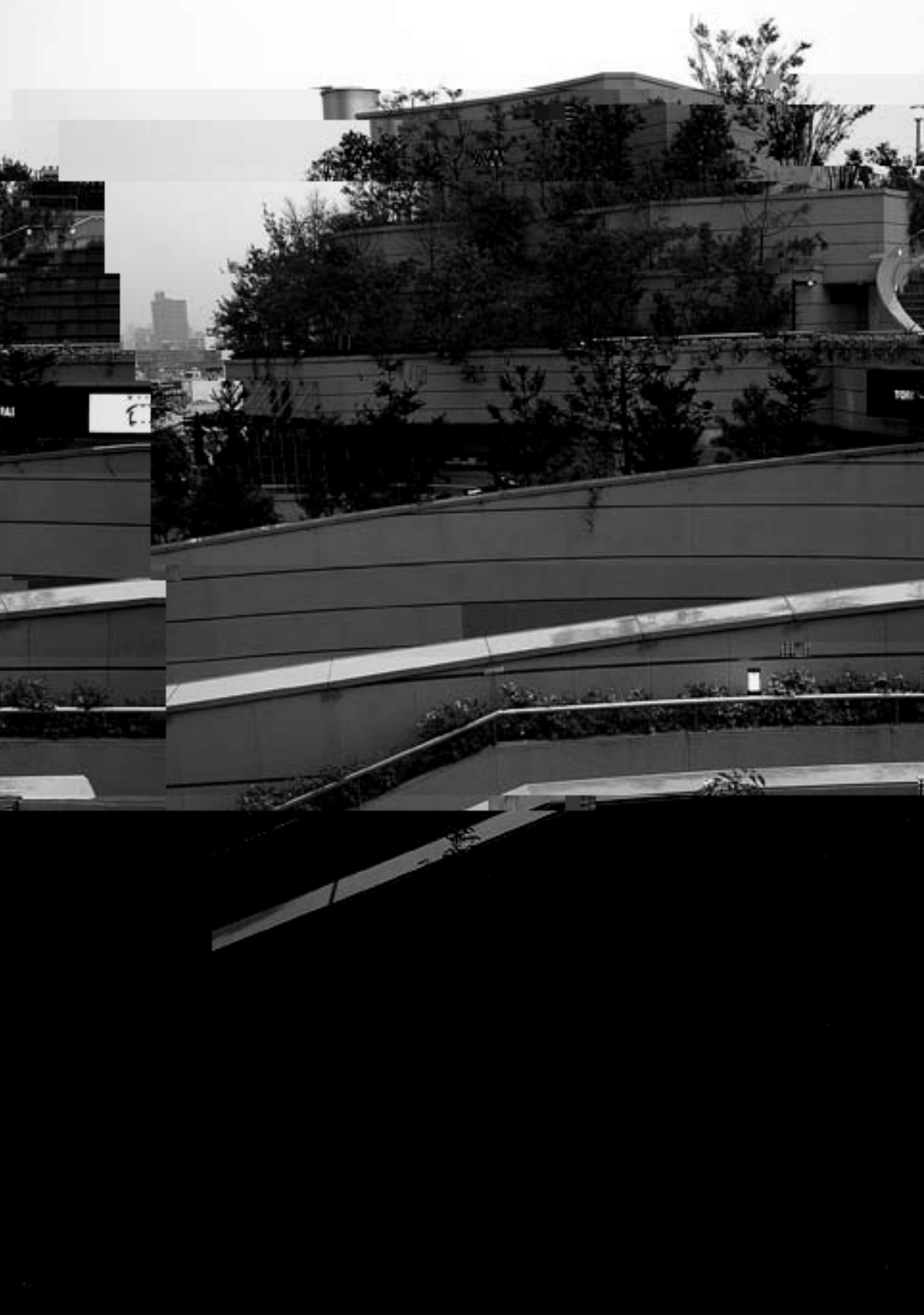
n

“

”L L 10

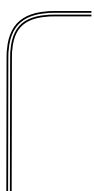
F

F





£



F



1.

F

F

2.

10% 15%

F

n



n

n

F

n

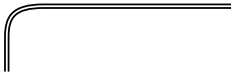
F

F

3.

F

4.



3

F

n n

F

n n

n

F

n n

F

3.1

Nalbm Papi

F

NK





F

F

8

F

F

n

n

F

F

F

16



»



F / /

F

5

F

n

F

3.2

n

8

F

F

30

F

n

Mmpg

15

F

“ ”

“ 8 ”

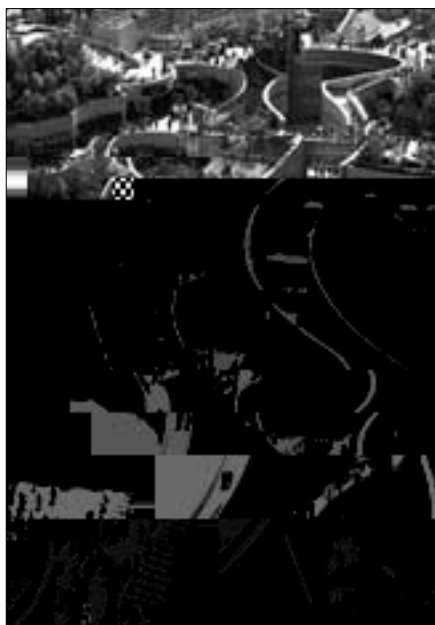
F

F

“ ”

F

8





1 A

F

F

F

F

3.3

F

F



A 1 666.6 F



30

n

F

n n n n n n

F



4

n

n

F



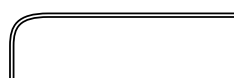
4.1

4.1.1



n

n



n

n

F

200

n

n

200 | 500

F

F

n

n

n

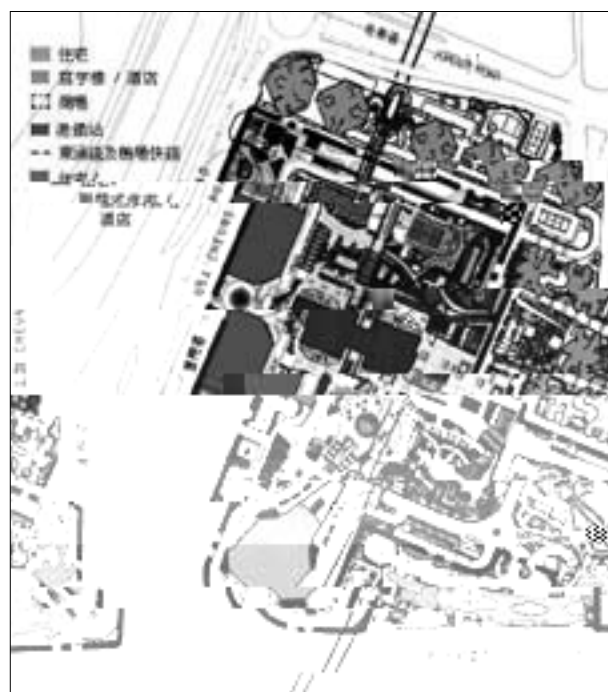
n

n

n

n

F



2.

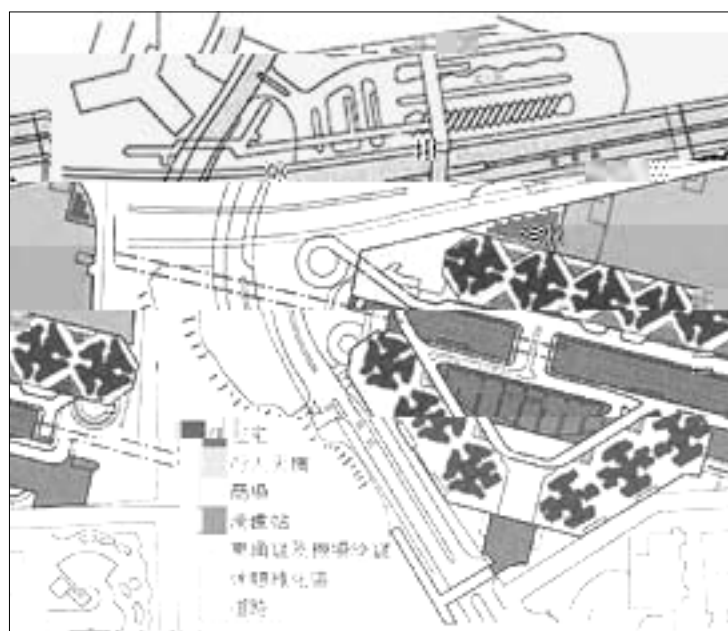
F

●

F1998

50 298 F

F





100

n

84



93% 3.24 253 765
7%

F

4.1.3

n n n

2|3

F

1969

1988 n

1991

20

F

F

1.

1 F

6

3 F





F



F

$$\mathbb{L} \quad \mathbb{L}$$

F

85 024

F

F



1000

35 F

F



2 .

F

n F

F 20

F

“ ” 10



F

n

F

F

F

F

F







F

n

F

12

“ p ”

L L

F

n

F

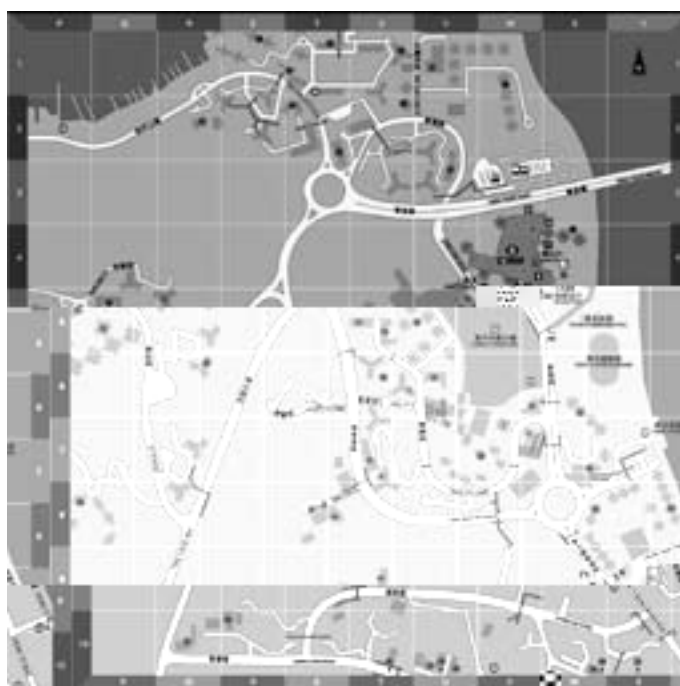
F

F

F

F

F





4.1.4

F

“ ”



4

n

F

4.2





1 L L

n n n n n

60 F

4.2.1

2008

F

F

CBD 2 1 “ ”

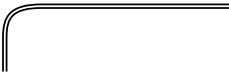
n “ ” F “ ” F

4.2.2

F

F





4.2.3

60
F 2008 B

CBD

1.8

F
CBD
F

1.

141 136
F



F

2.

50 | 480

F CBD

f 3%



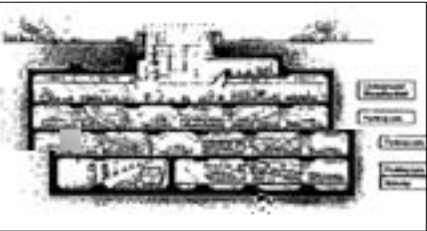
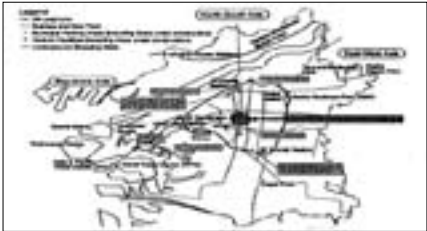
5

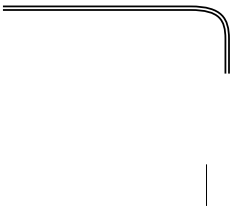
F

5.1 Nagahori

5.1.1 Nagahori

- F
- JR 7 4 5
- F
- 1992 10 1997 5 F
- 827 F
- F 81 800



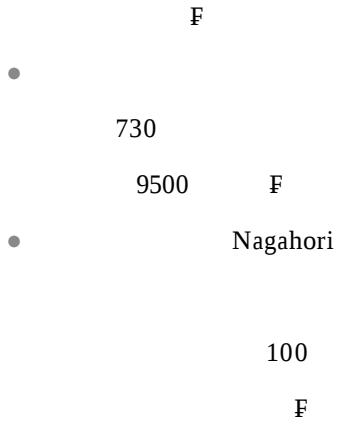
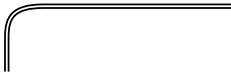


5.1.2

●			n		n		n
					5		₯
●			n				
	n	n		1030			₯

5.1.3

●	Nagahori	Nagahori	860	₯
●				

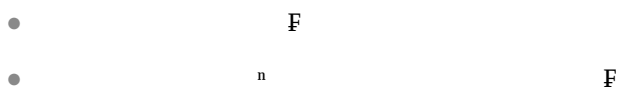


5.1.4



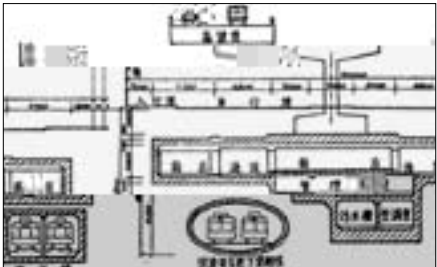
5.2

5.2.1





- 6 F
- 1000 50 6 F
- F
- 15 440 F



5.2.2

n

300 F

n n n F

n n 310 F

F

F

5.2.3

F



F

F

F

1000

F

F



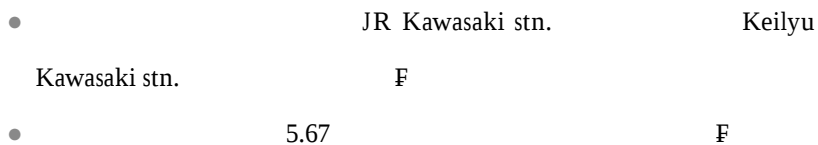
F

F

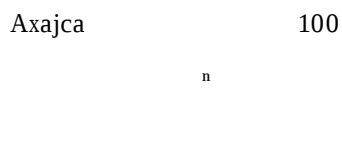
F

5.3 Azalea

5.3.1 Azalea

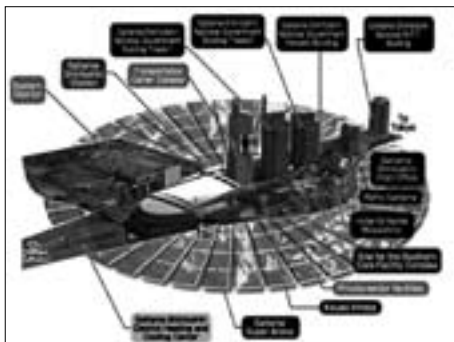


5.3.2





Ř



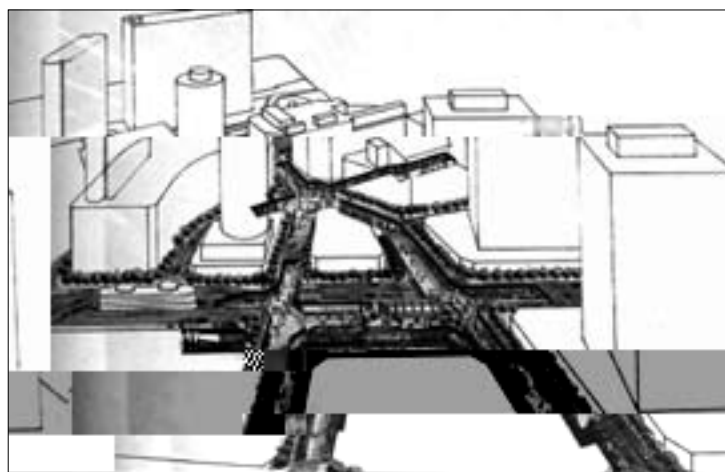
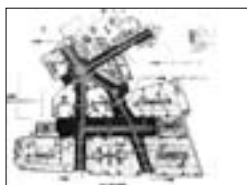


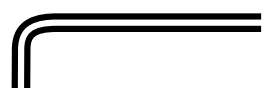
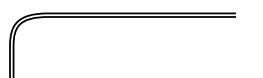
- n n 240 ¥
- n ¥
- Whity 150 ¥



6.3.2

- ¥
- Whity n ¥
- n n
- 300 ¥
- 5 n n 3 20 | 30 9 2 4
- 38 ¥



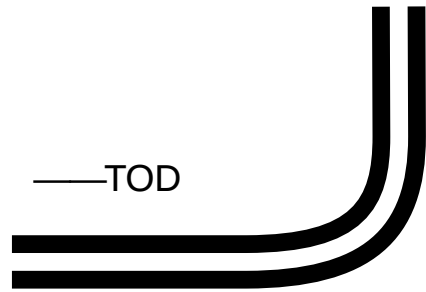


/

/

/



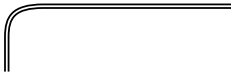


TOD F n n

F

F

TOD F n F



7

TOD

7.1 TOD

“ ” “ Tpa1qgr Opgclrcb Dctcjmnkclı ”

TOD F

F

□ Percp Cajrfmpnc FTOD

n n

F

F

7.2 TOD

“ ” n

FTOD

10

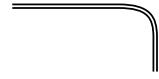
F

TOD

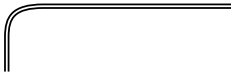
n n n

F

TOD F

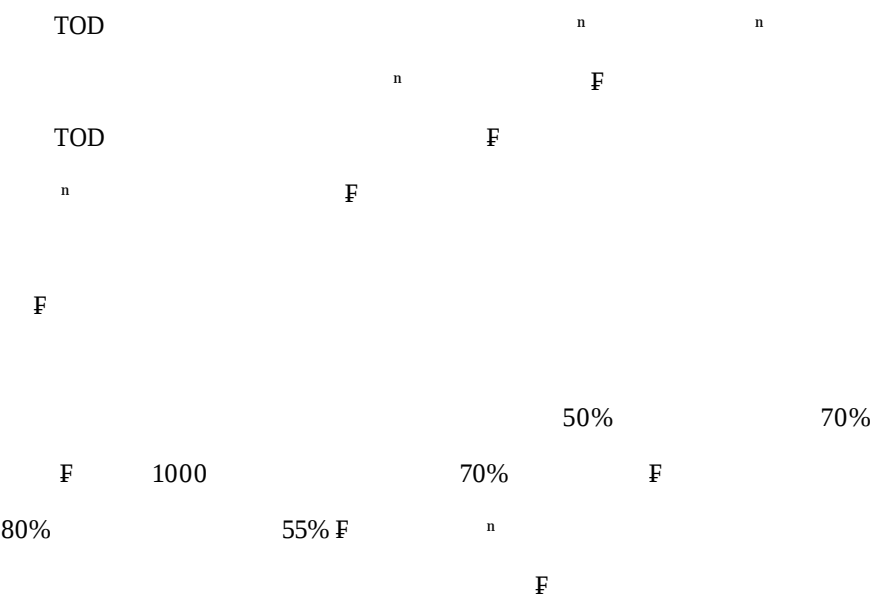


7.3 TOD 3D

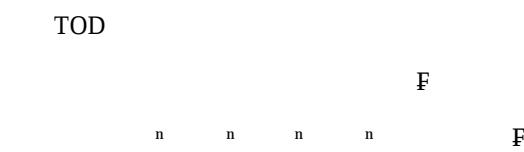


8 TOD

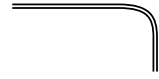
8.1



8.2



8.3



F

TOD

F

“

”

F

30

F



9 TOD

9.1

TOD

n

n

n

F

F

TOD

F

TOD

F

F

F

1

F

1

n

F

9.2

F



1

n

1

1

F

9.3

n

F

n

F

30

F

n

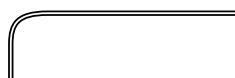
F

1

F

9.4

TOD

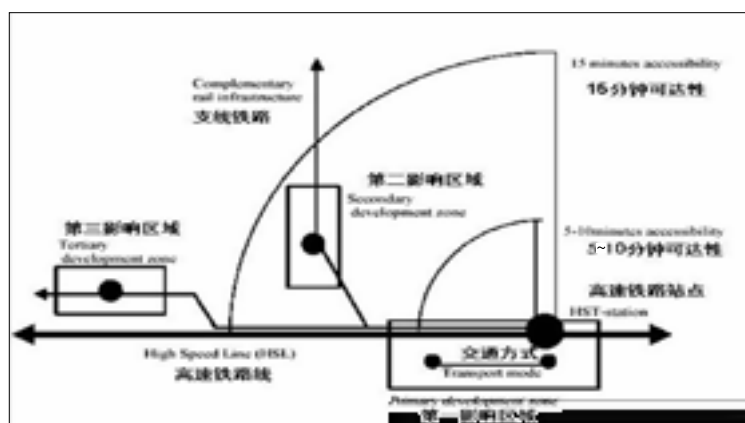


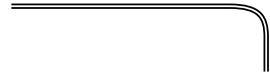
F

“ ” F



F





10

10.1 21

10.1.1

21

F

21

F



‡ n

£

£



n



£

10.1.2

21

n

n

186

11

n

n

87

46

£

2003

5

980 £

n

£ 21

n

2003

1000

350

£

n

n

n

n

n

£

n

£

n

£





10.2

10.2.1



12

Ok gwa

JR

F

Tmba

Bghmeg

Mgs pa

F

F

10.2.2

n

F

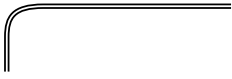


n

n

F

ha		
	12.3	25.9
	0.5	1.1
	1.7	3.6
	0.1	0.1
	14.6	30.7
□	32.3	68.2
	0.2	0.4
	0.3	0.7
	32.8	69.3
	47.4	100.0



- 47.4 F
- 5.7
- 1200 / F
-



n

n

F

n

n

F

2000

F

□

F

290

F

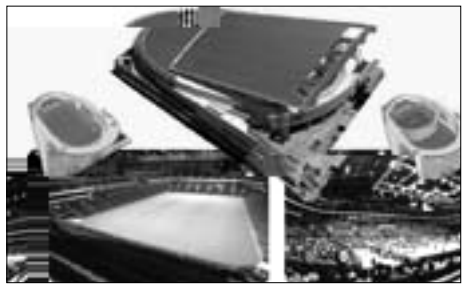
F

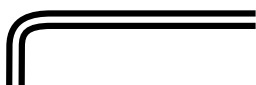
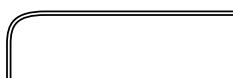
n

n

30

F





0. .4

ℓ

№

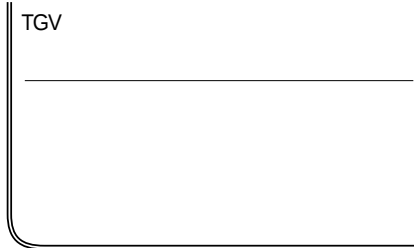
-

/



11 TGV

F
 “ ” F
 F
 1981 380
 1988 400 406.9 1990
 515.3 F
 200 80
 F 1981 9
 6 1520 2500 F





==

Espajgjc 1988





2.

F

3.

F

4.

F

5.

n

F

11.1.3

1.

“

”

“

”

n

n

F“

”

(

n

n

n

n

n

)

n



F

“ ”

n

n

(

)ⁿ

n

F

2.

“ ”

F

11.1.4

“ ”F 2001 “ ”

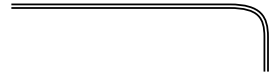
6500

1400

100

F





2.

F

3.

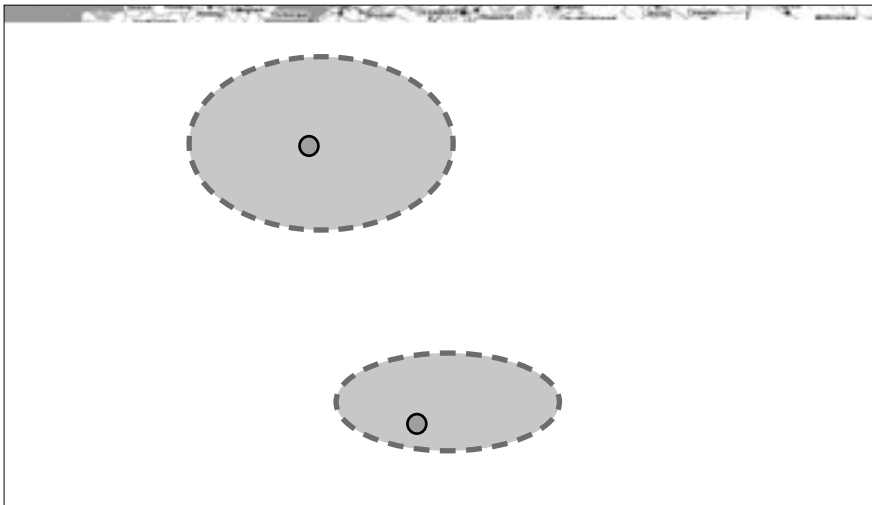
F

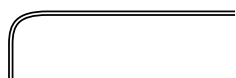
4.

2

7%

14% F







1863 1 10

146

F TOD

F

n

n

F

F

F

n

F

n

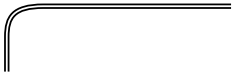
n

n

n

F

F



12

TJD



12.1





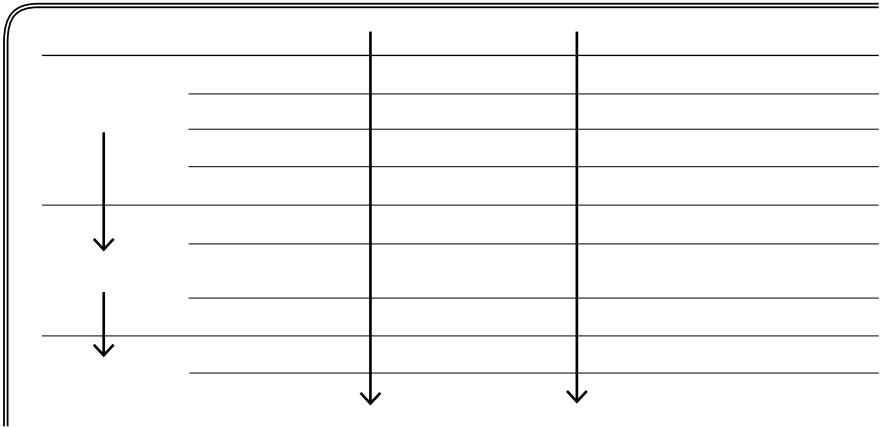
12.2

1991	2000	10	5	60
4	1600			76%
"	"	"	"	
20	1999	1.	20	50%
321.9		2.		50%
		3.	2002-2005	17.29
		"	"	

12.3

12.3.1

1.



2.

4

60%

" "



12.3.2

	1.		1.
	2.		2.
	3.		3.
	4.		4.
			5.
	1.		1.
	2.		2.
	3.	" "	
	4.		
	1.		1.
	2.		2.
	3.		3.



- - - / 3
60,0
- /
/ .

1980~1991

3

778 130	194 979		178	
		3 079		
358 592	76 866		227	
224 817				
	561 569	412 369	124	270
	334 007	211 104	103	188
286 699				25
		1 141	2	
	167 359	111 763	59	
	287 851	195 605	161	415
1 648 238	1 622 631	935 061	854	898

2.

3.

	3.24	9	
	5.55	4	103 130
		2	
	1.8	6	
86	32.68	50	
	43.27		103 130

12.5

n n



18

139 300

8



•

F

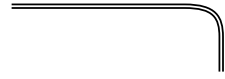
•

F

•

F





13 TOD

13.1

£ 20 60



n

5

(

) n

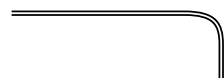
n

n

3 F

F

13.3



F

13.5

F



14



14.1

2008		1 ⁿ	2 ⁿ	3 ⁿ	4 ⁿ	F
● 1	18.497	16	F	122.616		
	F1997 6 28	5		F1999 6 28	1	
				F		
● 2	23.265	20		119.59	F	
	2002 12 29			F2003		
	6			F		





● 3	36.33	18	159.05	£2005
12 26 3		2006 12 30	£	
● 4	39.81	15	£2005 12 26	
			2006 12 30	
		£	2007 6 28	£



1994~2000		2000~2004	2005~2010	
1		27	1	

14.2.1

1.

1 1992

1 F

27 1 34.8 F

n n n

“ ”

200 F



27 32
200 ¥

1
122.616 ¥



2.

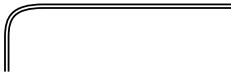
27 3 7
2 ¥
2004 3 4
38 19% ¥

3. —

22
1 ¥

¥

¥



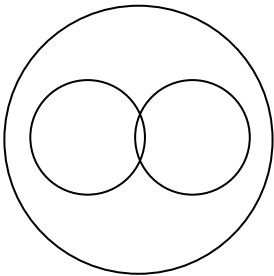
4.

1994

F

F

F



1.

2.

5.

n

n

n

F

14.2.2

1.

2

F

70%

n

2

ⁿ3

ⁿ4

ⁿ5

134.09

F



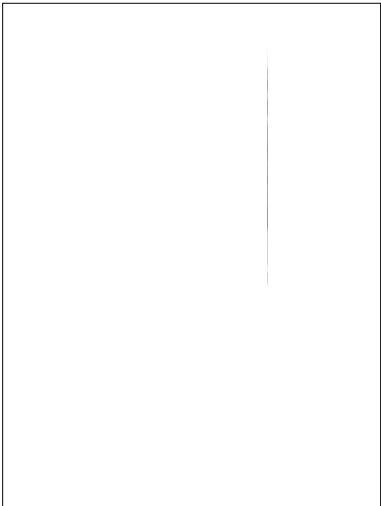
2.

n n

F

2001 2003

56% 2004



F

2004

1 2

F

2000 53%

2003 "2004

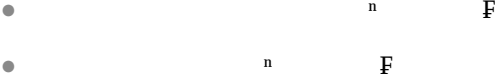
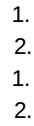


F

F

3.

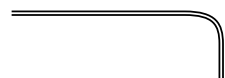



$$\begin{array}{ccccc} & & & & \mathbb{F} \\ & & & & \downarrow \\ n & & n & & \mathbb{F} \\ & & & & \downarrow \\ & & & & \mathbb{F} \end{array}$$


F

1.

116



2.

—

n n n

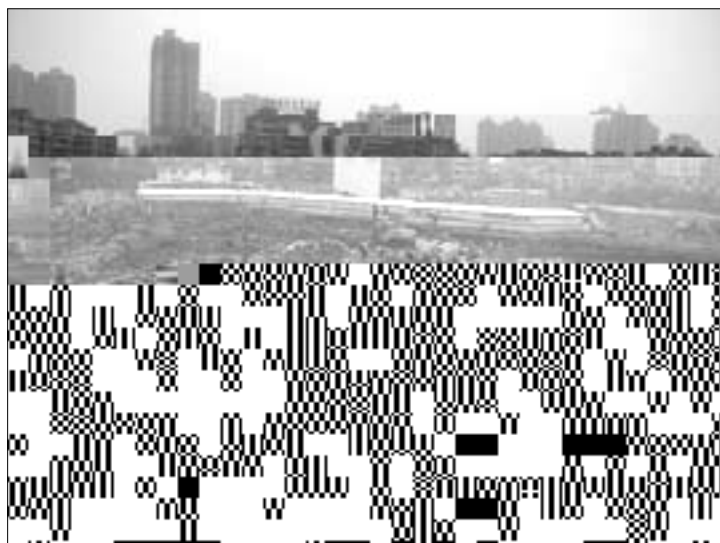
“ ” F

F

F

L L 1

F





3.

F

F

đ

o

."

Č





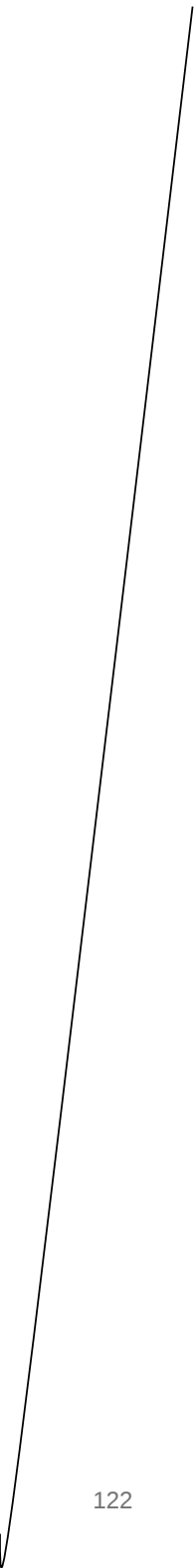
F



n

n





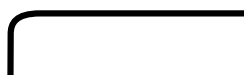


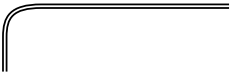
3.

—

“

”

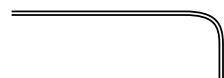




16

16.1

TJD



2.

F

F

3.



n

F

F

16.3.2

21

F

F

F

n

F

F

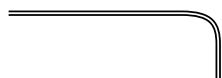
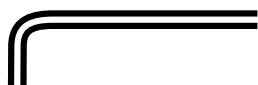
F

F

F

F

F

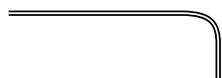
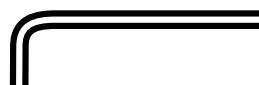


n

F

n

F



- 1 □ . M . 4 2002.
- 2 f



- 25 Ccptcpm Rmbcpr. Ragj rpalqgr alb bctcjmknclr J . Jmsplaj md rfc Akcpgaal Pjallgle 1994 60 1
Aqqmagargml 1.
- 26 Dmsejaq R. Cakngml Tfmkaq F Lapugl Jmfl W. Safs kalpg Rgafapb P Wmjdcjb Lgefr Ragj Tpalqgr Fsrspc
Onnmprslgrgcq alb Cfalecq.
- 27 Fmpkal R Dcbjglecp R. Tfc camjegaaj pmab-cddcar xmlc md a Maqqaafsqcrrq USA qsbpsbal fgefuaw J .
Cmlqcptargml Bgmjmewk 2000 14 36-46.
- 28 Gpcempw L. Tfmknqml Tmk Marmdd Upbal Ragj gl 2lqr Cclrspw Akcpgaa.
- 29 LUCA B TEhm S Cgrgcq ml pagjq M Lmlbm1 E & FN Snml 1998.
- 30 Kgg Jgl. Mgle Zfale. Dcrpc kglgle Tpalqgr 'q Iknaar ml Scmsj Cmk kcpagaj Lalb Vajscq 2005.
- 31 Hsale W. Tfc cddcarq md rpalqnmprargml gl dpaqrpsarspc ml lcapbw npmncprw Vajscq: a pctgcu md rfc jgrcparspc J .
Ilqgrsrc md spbal alb pcegnlaj bctcjmknclr 1994.
- 32 Kccdc p L. A Rctgcu md Ng1c UMTA-Aqggqrcb Jmg1r Dctcjmknclr Ppmhcar M . Waqfglerml: Upbal Maqq
rpalqnmprargml Abkg1gqrpargml 1994.
- 33 K1aan Gcp1p1r J. Cfc1epg Dgle alb Lcugq D. Hmn1glq. 2001. Dm njalq kar1cp? Tfc cddcarq md jgefr pagj njalq ml
jalbtajscq gl qrargml apca J . Jmsplaj md Pjallgle Ebsaargml alb Rcqcapaf 21 1 32-39.
- 34 PATRICK S M Tpalqnmprargml cam1mkga rfcmpw alb npaargac a aaqc qrsaw annpmaaf M BjaaiucU Psbjqfg1le
2001.
- 35 Ppmrcp Dmsejaq R. Tpalqgr-dmasqcb Dctcjmknclr: A Sw1rfcqq md Rcqcapaf alb Evncpgclac. Tpalqgr Cmmncpar1tc
Rcqcapaf Ppmepak Rcnmpr 20 M . Waqfglerml DC: Tpalqnmprargml Rcqcapaf Bmapb 1998.
- 36 ROBERT C Tfc rpalqgr kcrpmnmj1q-a ejmbaj g1osgpw M Iqjalb Ppcqq 1998
- 37 Tpalqnmprargml pcqcapaf bmapb l1rgmlaj pcqcapaf amslagj A tajsargml md rfc Rcjargmlqfgnq Bcruccl Tpalqgr alb
Upbal Fmpk J . Rcqcapaf Rcqs1rq Dgecqr Js1c 1995.