

Developing Accessibility and Connectivity on Gili Iyang Island, Indonesia

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Ghyharslj #Dffhvvlebw| #dgg#F rqqhfwyw| #rq#J b#| dqj #vølgg/#qgrqhvbl#

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J b#| dqj #vølgg#v#d#rxulw#ghvwlqdwlrq#hfrjq|hg#iru#ghyharslj #d#khdok0irfxvng#lgxvwu| #r#d#wudfw#yvlwruw| #vudqvsruwlrq#dgg#qjdwvxfwuh#fkdcngjhv#q#kxh#rxulvp #vhwru#duh#p srudqwdudv#r#n{dp qh#iru#kxh#lgxvwu| #v#surjuhvv| #kxhuhiruh/#k#l#hvhdufk#l#p hg#r#ghwup qh#kxh#ljk#w#wudwj | #r#surp rwh#khdok#rxulvp #lq#Vxp hqhs/#Hdv#Mdyd/#lqgrqhvbl#G dwd#dqddv#l#lqfoxghg#d#frp sukhqvlh#h{dp lqdwlrq#xvlqj#txddwlyh#ghvfulwlyh# hwkrqv/#p srudqfh0Shuirup dqfh#Dqddv#l#USD ,/#dgg#D#F rqqhfwyw| #qgh{ #Wkh#hvxow#krz hg#kdw#kxh#rswp d#wudwj | #ru#J b#| dqj #vølgg#v#r#r#fxv#r#q#qfuhdv#lqj #dffhvvlebw| /#hqvxlqj #liirugde0#wudyh#erw/#dgg#p dlqwdlqj#frqyhqhqfh#Dvshfw#r#dffhvvlebw| #w#p suryh#lqfoxgh#urdg#qhwe runv#dgg#p rghv#r#wdqvsruwlrq#Ixukhup ruh/#kxh#F rqqhfwyw| #dvshfw#kdw#p xvw#eh#p dlqwdlqhg#duh#urdg#dffhvv/#vhdswr/#dgg#ihw|#r#w#Wkh#khdok#rxulvp #ghyharsp hq#w#wudwj | #z dv#p s0p hqwhg#z lk#d#sdwif#sdwru| #lssurdfk#dgg#p hg#d#whfkqrarj | #frqyhqhqfh#Wkh#p dlq#ruj lqddw| #r#Wkh#hvhdufk#lqfoxghv#khdok#rxulvp /#qdwud0#F rgg#wlrqv/#dgg#lqdwvxfwuh#Dgg#wlrqdw| /#kxh#hvhdufk#hfrp p hqgv#kdw#rxulw#h{ saruh#qdwud0ghvwlqdwlrqv#fkdufwuul}hg#e| #qsrøwng#l#dgg#k#ljk#r { | jhq#hyhov#

KEY WORDS

£#Dffhvvlebw| #
£#F rqqhfwyw| #
£#J b#| dqj #vølgg#
£#R { | jhq#vølgg#
£#Khdok#Wrxulvp #
£#SD#
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⁴D iiddwlrq#r #F ruhvsrqqlj #Dxwkr#

⁵D iiddwlrq#r #kxh#rwhu#Dxwkr#v,#, #d#l#l#huhgw#

h0p dle#[hp dbric fruhvsrqqlj dxwkr#](#)

grl#p wkl#h0g#z l0eh#l0ng#e | #hglwubd#erduq#ksrq#xedvklqj #r#Wkh#duwf0A#

Uhfhlhng#rq#p gdwhA #Jhylyhg#rq#p gdwhA #Dffhswng#rq#p gdwhA #Sxedvkhg#rqdqh#p gdwhA#

Wkl#z run#v#f#hqvhg#kqghu



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1. INTRODUCTION

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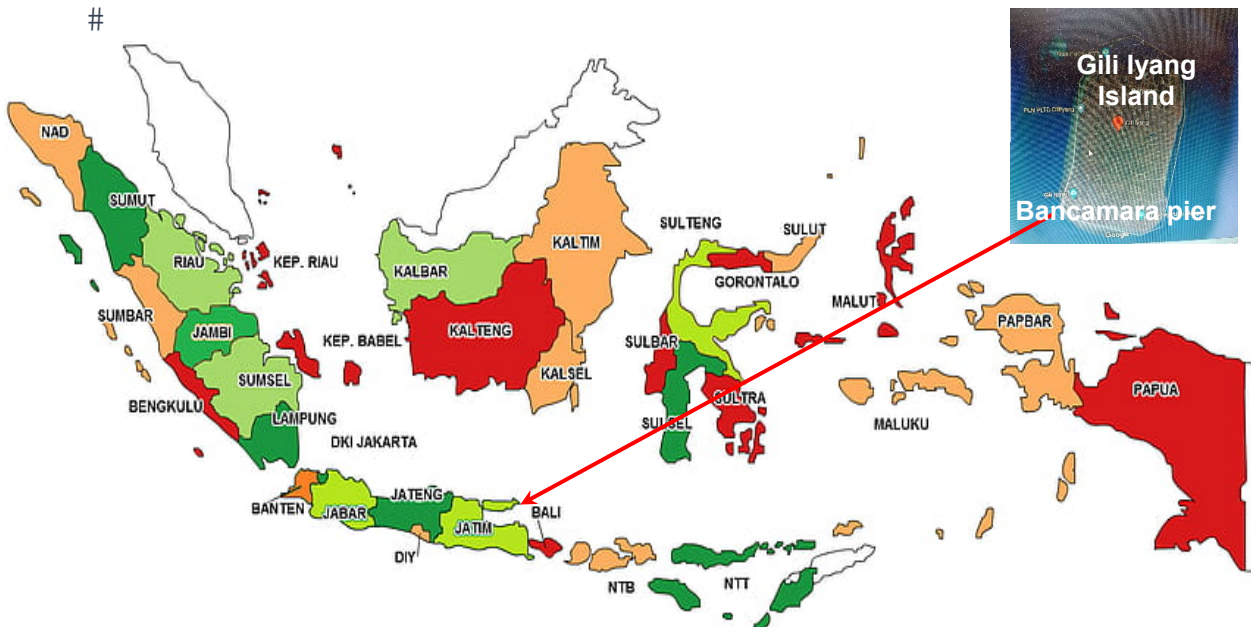
Iqgrqhvld/v#q# #kh#dujhvw#ufkshøj lf#rxqwl#q#kh#z rug/v#qrz q#ru#w# {wdrug bdu| #dwxud# z hdo#/#z lk#4 : /835#dgg#4 : /83 ; #vølgv#hsruhg#e | #Vxnp dz dq#Ehø#Shu#z #+5353 ,#dgg#H#G#xqduw#k#h#d# +5354 ,#hvhshfwy#d# #dfruglj#r#kh# #hrvsdwd#q#rup d#r#q#d#jhqf | /#kh#ølg#ølg#z dhu#h#d#v#h#h#k#38#p lørq# np #dgg#58 : #p lørq#p #hvhshfwy#d# /p d#lj#kh#r#v#d#h#d#h#kh#rxqwl# #14 ; 3#p lørq#p #K#dvdqdk/#5353 ,# Z lk#d#rdw#q#h#q#j#k# #4 /333#p /Iqgrqhvld#d#q#v#h#frqg#d#l#h#F d#d#d#d#r#kh#q#j#h#v#rdw#q#h#q#kh#z rug# +Shu#z l/#5353 ,#Wk#v#h#xow#q#d#h#y#h#h#d#d# #r# #vølgv/#z lk#kh#p d#r#u#l# #k#d#lj#d#q#h#d#h# #h#v#k#d#q#5 /333#p # ru#hy#q#133#p #G#h#r#p /#533 : ,/#dgg#k#<1 ; (# #kh# : /83 ; #vølgv#k#d#h#d#q#h#d#k#q#gh#5 /333#p #G#xqduw#k# h#d#d#5354 ,#Wk#h#g#y#h#w#l# #j#urxsv#vølgv#q#r#v#l# #f#d#h#j#ru#h#v#F r#q#h#q#w#Y r#f#d#q#l# /#Orz ølg# /F r#u#d#D#w#ø#dgg# D#u#l#f#d#vølgv# #J#u#d#} l#w#5356 #V#d#k#h#q#u#d#x#p# du#) #W#l#g#h#q#4 < ; < ,#D#q#r#y#h#y#h#z #r# #Iqgrqhvld#d#v#kh#dujhvw# dufkshøj lf#rxqwl# #q#kh#z rug/v#krz q#q#h#lj#x#h# #h#ø#z #

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Map of the Republic of Indonesia



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Vrxufh#k#wsv=2z z z 1s {ixhøfrp 2hq2ghvnwrs0z dæsdshuøkt { }n#

#

I#j#x#h#1# #Wk#K#q#l#u# #v#d#h#r# #kh#J#hsx#e#f#r# #Iqgrqhvld#F#r#q#v#l#w#r# #p ru#h#k#d#q#4 : /833#vølgv#G#xqduw#k#h# d#d#5354 #Shu#z l/#5353 ,#v#kh#dujhvw#ufkshøj lf#rxqwl# #q#kh#z rug#

Hd#w#M#d#y#S#u#r#y#l#f#h#sø#l#v#d#q#p srudq#w#r#d#h#q#kh#z hdo#k#r# #kh#vølgg#Iqgrqhvld#k#d#v#d#h#r#v#d#rdw#q#h#r# # 6/7< ; 145#p #dgg#q#p hurxv#p d#vølgv/#v#x#k#d#v#Q#xvd#E#durq#j#vølgg#q#M#p ehu#U#h#j#h#q#f | /#V#h#h#d#vølgg#/#dgg# S#d#q#l#d#q#vølgg# #q#W#h#q#j#d#d#n#U#h#j#h#q#f | #K#r#z#h#y#h#u# #d#v#d#q#d#ufkshøj lf#u#h#j#l#r#q#Hd#w#M#d#y#S#u#r#y#l#f#h# #d#f#h#v# frq#q#h#f#w#l# #dgg#d#f#f#h#v#l#l# #f#k#d#h#q#j#h#v#k#d#w#p x#v#h#d#gg#u#h#v#h#g#w#r#p s#u#r#y#h#w#k#h#f#r#q#r#p | #dgg#u#h#j#l#r#q#d# frp shw#y#h#q#h#v#v#N#x#u#q#l#z#d#q#/#5356 ,#

2.1. Literatur Review

Khdok#wrxulp#lv#gy#gghg#lqwr#wkuhh#fdwhj#ruihv#uhfuhdwirg#ruhgwdirg/#khdok#surp#rwrq/#dgg#p#hgIfd#ruhgwdirg#r#hfhundwirg#ruhgwdirg#qfoxghv#lwn|#dfwly#lwn#dgg#ghz#h#{shuhqf#hv#k#h#khdok#surp#rwrq#qyrghv#p#sury#qj#h#{huf#h#kde#lw#hngxf#qj#whvv#dgg#qfuhnd#qj#k#vlfde#wuhg#wk#p#hgIfde#ruhgwdirg#r#fxvhv#q#wkh#wndvp#hgw#h#gh#hndvh#dgg#kh#hvw#ruiw#r#khdok#Ohh#)#Dl#534<,#

Wkh#ghyharsp hqw#r#lgiudvwxfwkuh#fdq#lghudvh#wrxulp #lqfrp h#dgg#p suryh#wkh#txddw#r#wkh#hgylurqp hqw#dgg#wrxulp #ghwlgdwlrgv#P hjdz dw#hwdd/#5356,#lgiudvwxfwkuh#lv#d#fuxfdd#lvvxh#lg#ghyhars lqj#khdok#wrxulp #Ud#w#hwdd/#5355,#Idf ldlhv#vxssru#lqg#idf ldlhv#wrxulp #dfwylwlv#wrxuq#p rrwkd#J kdq#)#Eudkp dqr/#5348,#wxfk#dv#wdgvsruedwlrq#J kdq1#534:,#lq#wk#fgrqh#w#wrxulp #lgiudvwxfwkuh#lqfoxghv#urdgv#whup lqdw#eulj hv#lqg#ldf hvvle ldlw#I vx#hwdd/#5355,#

Dffhvwlebw|hnhw#r#kh#frqghfwlrq#ehwz hqg#|rqhv#k#urxjk#urdgv#lqg#wdqvsruw#ghwz runv#lqf#xglqj#
ihw|#wdqvsruw#Olp dq/#5356,#Wkl#|dfwru#v#p srwdqg#lq#kh#udyh#surfhv#|dv#kh#ndvh#r#|hndfk.lqj#d#r#xulw#
duhd#ghshggv#r#q#dffhvwlebw|/#x#fk#dv#rdg#frqglwlrq#v#lqg#kh#|dydllebw|#r#|wdqvsruw#lwrq#p rghv#Wdp h#hw#d#
5355,#Urdg#r#srjudsk|#fdq#eh#d#eduhw#r#p rrw#lq#ghudfwlrq#q#lq#d#duhd#Edvhg#r#q#kh#k#hruhw#fdq#ghvfuswlrq#
r#|dffhvwlebw|/#kh#lqg#fdwru#lq#f#xgh#4,#dydllebw|#r#|urdg#ghwz runv/#5,#dydllebw|#r#|wdqvsruw#lwrq#p rghv#
+6,#lq#p eh#r#|wdqvsruw#hk#lf#dv/#7,#urdg#t#xdl#/#8,#udyh#lq#p h#/#9,#udyh#f#rvw#/#:#r#fdwlrq#lq#lwdqfh#lqg#:#
hdvh#r#|dfk#hy.lqj#remf#y#hvru#dyh#d#r#frqyhg#hgf#h#-Y#dy#lf#5349#Sul#dp ergr#hw#dd#5357,#Olp lhg#
dffhvwlebw|#kdv#d#p dnu#p sdfw#r#q#kh#h#frqrp|#dgg#f#rp p xqlw|#dfw#y#lhw#z k#fk#duh#k#lq#d#ghshggghw#r#q#
wdqvsruw#lwrq#q#ludvwx#fwxh#

DggWrgdQd|/FrqghfwYw|Wvnh|WrexlgLj#dHjrrgV|vhp#qg#qgrghvblRshqLj#dfhvwW#fhghvw#qg#
 Lqgrghvbl#v#hvvhgWd#ru#ghyharsp hqw#Sul|dqWd#)#Dqdv|d/#5356,#Wkh#ErxqW|#p xvw#suhwW|h#frqghfwYw|#
 ehWz hhg#uhj lrvW#W#uhgxfh#sryhuW|#surp rvh#ghyharsp hqw#dgg#hqkdqfh#frp shWYhghvw#HVFDS/#5347#
 Sul|dp ergr/# 5349,# HiifLqW# frqghfwYw|# utxLhv# d# z hOfrqghfwg# wdgvsrudwLrq# v|vhp /# p dnlj#
 Lidwxfwuh#d#fxfld#frp srghqW#Sul|dp ergr/#5349,#WkL#hvxow#qg#qfuhdvhg#dfhvwW#HjrrgV#dgg#huYfhw#
 dw#rzh#dgg#wdeh#sulfhv#dv#z hOdv#hiifLqW#dgg#hdeh#wdgvsrudwLrq#huYfhw#FrqghfwYw|#hLhwW#Wkh#
 uhOwLrqvKs#ehWz hhg#qrgHV#ru#srLqW#dqngh# |#dghv#ru#dgnv#qg#vhd#wdgvsrudwLrq#Wkhvh#srLqW#duh#srwW#ru#
 vrsryhu#Odfhv#ru#kLsv#P xvdnLp #hw#id/#534: ,#

Wt#Bgdq}h#k#h#r#wqwd#v#h#gj#k#r#q#h#u#d#f#w#r#g#e#h#z#h#g#h#j#l#r#q#v#h#g#h#p#v#r#k#h#r#d#g#f#g#z#r#n#v#w#f#w#h#
d#v#u#d#g#v#r#u#d#w#r#g#q#i#d#v#w#f#w#h#/#u#s#k#k#h#r#u|#v#k#v#g#e|#e#r#p#s#u#l#g#j#k#h#p#p#e#h#r#f#l#w#v#r#u#h#j#l#r#q#v#z#k#k#g#l#i#h#u#g#
u#r#x#w#v#k#h#r#w#h#g#j#k#r#k#h#q#h#u#d#f#w#r#g#v#h#g#h#p#l#g#h#e|#k#h#f#r#g#g#f#w#l#w|#g#g#{1#d#k#j#k#h#f#r#g#g#f#w#l#w|#g#g#{#d#o#h#
g#g#f#d#w#v#p#r#h#r#d#g#f#g#z#r#n#v#d#n#g#j#k#h#f#l#w#v#r#u#h#j#l#r#q#v#M#x#g#d#g#h#h#d#d#5355,1#

Wkh#p r#w#f#p p r#q#x#h#r#f#r#g#h#f#w#l#l#h#h#v#r#r#f#d#d#u#r#g#d#q#v#i#r#v#s#h#l#f#f#p x#o#p r#g#d#d#f#h#v#4,#
d#f#h#v#r#r#k#h#r#r#u#r#g#v#l#v#h#p #/5,#r#f#d#d#x#e#d#f#v#d#q#v#r#u#v#d#w#r#q#v#6,#v#d#l#g#h#p l#q#d#7,#d#l#s#r#u#8,#h#d#s#r#u#
d#g#g#9,#i#h#u#l#s#r#u#7#Wkh#v#h#s#v#i#u#p #v#d#q#v#l#h#h#g#h#f#r#g#h#f#w#l#l#u#l#r#u#d#l#r#k#h#q#h#d#h#v#g#l#v#d#g#h#f#d#g#e#h#
g#h#w#u#p l#q#h#l#g#d#p r#h#f#r#g#f#l#h#h#g#h#f#r#g#h#f#w#l#l#v#d#i#u#p #r#r#l#f#h#v#v#k#d#h#{l#w#e#h#w#h#g#v#r#r#v#h#p v#S#x#w#l#
534:~\$u#l#d#p#e#r#g#r#h#w#l#d#5357,~#

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Irnhlj#bqg#rfd#xw#fdq#v#w#|#d#|#v#qg#|#v#d#Uhg#bq#h#b#45354,|Krzhyh#b#ffhvw#b#|#
dgg#frqghfw#l#w#r#dgg#iurp#k#h#v#qg#d#h#v#w#y#h#|#q#l#g#p#v#k#45356,|q#k#l#f#r#q#w#v#d#q#v#r#d#w#r#q#
idf#b#h#v#b#q#g#i#d#w#x#f#w#h#p#x#w#h#e#x#b#q#g#h#y#h#r#s#h#g#K#h#d#k#r#w#u#p#z#k#b#w#d#f#p#d#q#|#r#w#u#w#z#k#h#q#k#h#h#v#
j#r#q#b#q#h#d#v#|b#ffhvw#b#|b#q#g#f#r#q#h#f#w#l#p#v#k#45356#z#l#v#r#r#h#b#45354,|

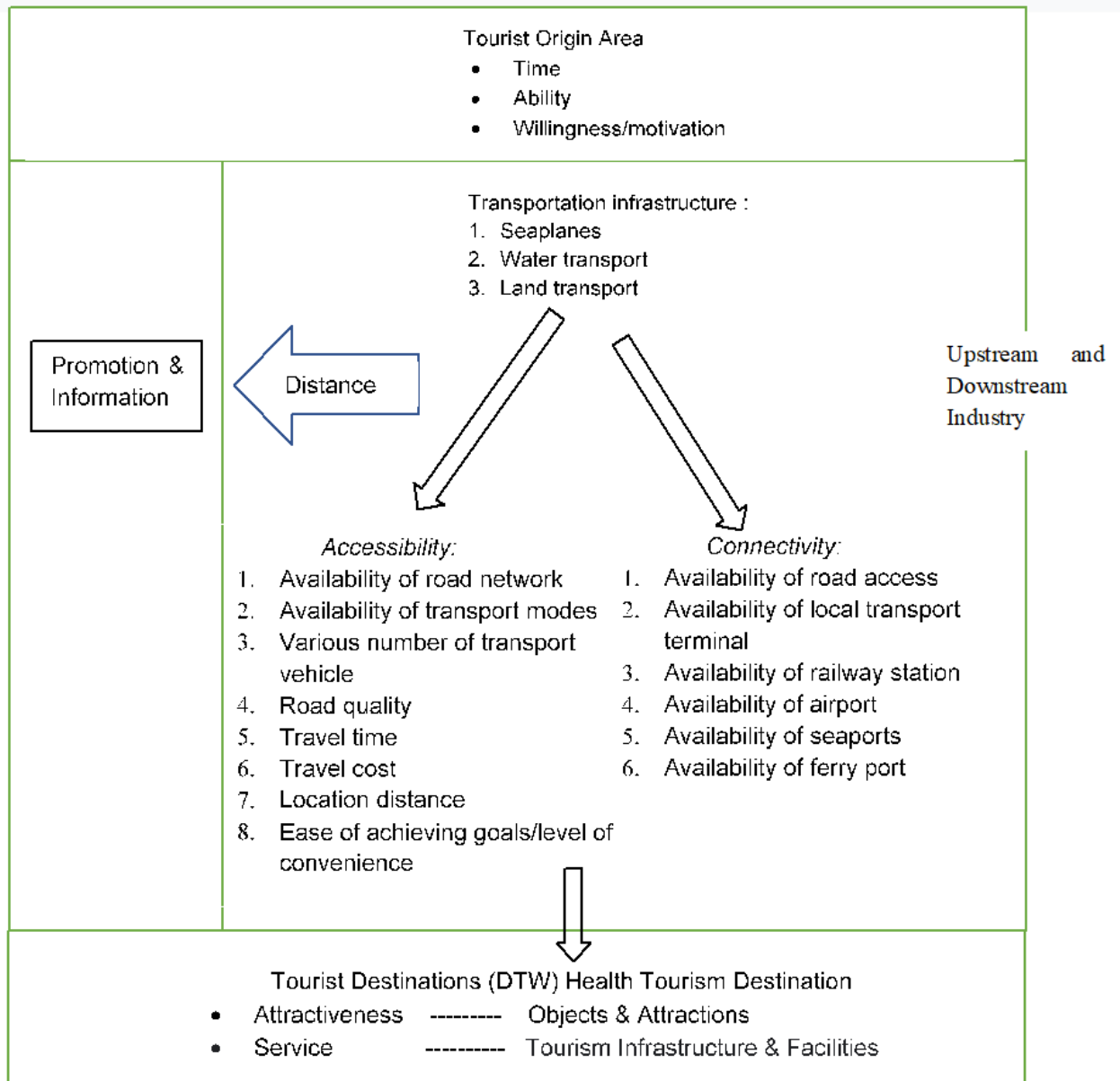
Wkh#bqwgxfwlrq#r#wdqvsrudwlrq#fdq#surp rwh#wkh#ghyharsp hqw#r#wkh#khdok#wrxulp #lqgxvwu|#
+Vhwldz dq# #Hxqlh#Nulw#Mxdwlrqr/#5347,1#Wudqvsrudwlrq#lwr#qixhghfv#kh#nfrqrp If#j urz wk# #kh#hj lq#e|#
vkruhqlqj#wdyhdw#p h/#hngxflqj#frvw/#dgg#lqfhdvbj#dfhvvbldw|#dgg#frqghfwylw|#+Sxwul/#534:,#Vlp ldu#
p hfkdlp v#kdyh#ehhg#p slifdwl#yhulhg#hj duglqj #kh#nfrqrp If#p sdfw#r#wkh#p rghv#r #wdqvsruw#xfk#
dv#ybwlrq#vhyfhw#lqg#kh#ghyharsp hqw#r#urdg#ghwz runv#

I lj xuh#5#krz v#kh#wrxulp #lqgxvwu|#ghwz runv#lqg#kh#ghwudwlrq#p hfkdlp #ehwz hhq#kh#wrxulp #lqg#
wdqvsrudwlrq#vhfwruw#Exglwkd/#5344#Z dusdq/#534:,1#Wrxulp #vkduhv#hdwuhv#z lk#vhyhulq#lqgxvwuhv#kdw#
surygh#j rrgv#lqg#vhyfhw#ghghg#dw#kh#ghwudwlrq#Wrxulp #vhyfhw#kdyh#z lghu#fryhujh#krz hyhu#kh|#
kdyh#jr#nfrqrp If#doxh#kh|#gr#grw#hndfk#kh#p dunhw#lqg#frqvxp hwl#lq#kl#fdv#Wudqvsrudwlrq#sdl#v#lq#ldc#
urdu#lq#p rylqj #lqgxwulq#surgxfw/#vxssruwqlqj#wrxulp /#dgg#vhyulqj#dv#d#eulqj#ehwz hhq#surgxfw#dgg#
frqvxp hwl#

Wrxulp #ghwudwlrqv#duh#vhsdudwhg#e|#glwdqfh#iurp #kh#wrxulw#fxuhqw#arfdwlrq#Wkl#glwdqfh#lv#
fryhuhg#|#rshudwlrq#l#wudqvsrudwlrq#v|vwhp,, lqg#vhd#ru#llu, ghshqqlqj#r#q#kh#frqglwlrqv#lqg#frqghfwylw|#
w#kh#ghwudwlrq#iurp #kl#shuwshfwyh/#ydukrxv#nfrqrp If#lfwylwlv#lqg#exvlghvv#kssruwqlwlv#iurp #jliuhq#
vhfwruw#fdq#j urz #lqqlqj #kh#frqghfwqlqj#fruibru#

Wrxulp #lv#grp lqdwg#e|#vhyfhw#lqgxvwuhv/#lqfoxglqj#edqnlqj/#fdwhulqj/#wxu#jxglqj/#wdqvsrudwlrq#
dgg#rwhu#vhyfhw/#z klfk#kdv#lqg#r#kh#fundwlrq#r#wrxulp #exuhdxv#lqg#wdyhdw#j hqf|#exvlghvvhv#D j hqf lhw#
kdyh#h{wqvlq#lqirp dwlrq#derxw#ghwudwlrqv#wkurxjkrxw#kh#z rug#dw#hdw#lq#kh#wrxulp #ghwudwlrq#duhdv#
wkh|#hsuhvhqw/#wrxulw#dwudwlrqv/#lfrp p rgdwlrq#lfdwlv#dw#kh#ghwudwlrq#lqirp dwlrq#hj duglqj#srdwldc#
frqglwlrqv/#Exuhqf|#h{fkdlqj#dwlv#lqg#wudqvsrudwlrq#ghwz runv#Nr#lflklyh#shuhfw#vhyfhw#Wrxulp #exuhdxv#
dgg#wdyhdw#j hqw#duh#klq#ghshqghq#r#q#kh#wudqvsrudwlrq#lqgxwul#Vlp ldu|#kh#ksvwhdp #lqg#grz qvwhdp #
lqgxvwuhv#ghshqg#r#ydu|lqj#ghj unhv#r#q#kh#wudqvsrudwlrq#v|vwhp #

downstream industry are dependent on varying degree of the transportation system.



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Vrxufh##Exgdukd/5344#Z dusdq1/534: ,#

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Ijxuh#5#Wkhruhfdd# iudp hz run# iru# wkh# jurz w# r# khdok# wxulp # ghvldwlrqv# wkurxjk# wdqvsruwlrq# ghyhorsp hqw#

2.2. Data

Wkh#uhvhdufk#z dv#frqgxfwng#iurp #P dufk#w#Q ryhp ehu#5356#dgg#xwd}hg#erw#sup du|#dgg# vfrqgdul#gdd#fronfwlrq#p hwkrgv#Sup du|#gdd#fronfwlrq#byrqhg#gldwlexwqj#txhvwlrqqdlhv#dgg# frqgxfwqj#lqghsk#lqwhuyhz v#erw#idfhwrddfh#dgg#e|#whdskrqh#Wkh#lqwhuyhz v#dip hg#w#dqqd}h#wkh# lqirup dqwr#h{shuhqfhv#dgg# rwydwlrqv#hndwng#r#wxulp #ghyhorsp hqw#

9#

#

FrqghfwyW|#hgJfdrw|#gfoxghg-#4,#dydlblebW|#r#urdg#dffhvv/#5,#dydlblebW|#r#afdd#sxedf#
wdgvsrwW#up hgdw/#6,#dydlblebW|#r#wdgh#wdrqv/#7,#dydlblebW|#r#llsrwW/#8,#dydlblebW|#r#wdsrwW#qg#
+9,#dydlblebW|#r#ihuw|#srwW#kh|#ffhvvbW|#qg#frqghfwyW|#txhvwWrgqdlh#irp v#dunWkrz q#qWdedvW#
dgg#5#

Wdehd# #D fffhvle ldlw #Sxw#B#fIn#p dun#v/#q#kKh#frox q#kdw# rx#kKIn#v#lssursudw#											
Ohyh#r i#p srwdqfh#					Qe#	Vwdwhp hqvwZf xhvwlrq#	Shuirup dgyh#Dhyh#				
8#	7#	6#	5#	4#			8#	7#	6#	5#	4#
					4#	Z kd#dun#kch#dydlole ldlw #r i#urdg#qhvw run#l# rx#z dqw#r#wdyh#r#J l# dqj #lvqlggv#lqg#y/fh#hwdB#					
					5#	Z kd#v#kch#dydlole ldlw #r i#wudqvsruwdwlrq#p rghv#l# rx#z dqw#r#wdyh#r#J l# dqj #lvqlggv#lqg#y/fh#hwdB#					
					6#	Z kd#Y durlxv#qxp ehv#r i#wudqvsruw#yhk l#dn#dun#dydlole dn#l# rx#z dqw#r#wdyh#r#J l# dqj #lvqlggv#lqg#y/fh#hwdB#					
					7#	Z kd#v#kch#xdlw #r i#wkch#ur dgv#l# rx#z dqw#r#wdyh#r#J l# dqj #lvqlggv#lqg#y/fh#hwdB#					
					8#	Z kd#v#kch#wdyh#p h#l# rx#z dqw#r#wdyh#r#J l# dqj #lvqlggv#lqg#y/fh#hwdB#					
					9#	Z kd#dun#kch#wdyh#f rvw#l# rx#z dqw#r#wdyh#r#J l# dqj #lvqlggv#lqg#y/fh#hwdB#					
					:#	Z kd#v#kch#r fdwlrq#g lwdqfh#l# rx#z dqw#r#wdyh#r#J l# dqj #lvqlggv#lqg#y/fh#hwdB#					
					:#	K rz #dv #v#v#r#wdyh#l# rx#z dqw#r#wdyh#r#J l# dqj #lvqlggv#lqg#y/fh#hwdB#					

Wdedn5#Frqghfwylw#5xwd#Wfn#dun#v,#a#kh#frop q#kdw#rx#kbn#v#dssursubwh#

Ohyh# #p srwdqfh#					Qe#	Vwdhnp hqgwT xhvwirg#	Shuirup dgyh#dhyhd#				
8#	7#	6#	5#	4#			8#	7#	6#	5#	4#
					4#	Z kd#v#kch#dyd#le l#w #r i#urdg#l f hvv#d# rx#z dqw#r#udyh#r#kch# J l#l dqj#v#lqgv#lqg#y/lh#y#hwdB#					
					5#	Z kd#v#kch#dyd#le l#w #r i#rfd#x#ed#f#udqvsruw#hup lqdr#d# rx# z dqw#r#udyh#r#J l#l dqj#v#lqgv#lqg#y/lh#y#hwdB#					
					6#	Z kd#v#kch#dyd#le l#w #r i#udlq#v#wirqv#d# rx#z dqw#r#udyh#r#J l#l l dqj#v#lqgv#lqg#y/lh#y#hwdB#					
					7#	Z kd#v#kch#dyd#le l#w #r i#l#l#r#r#w#d# rx#z dqw#r#udyh#r#kch#J l#l l dqj#v#lqgv#lqg#y/lh#y#hwdB#					
					8#	Z kd#v#kch#dyd#le l#w #r i#h#d#r#r#w#d# rx#z dqw#r#udyh#r#kch#J l#l l dqj#v#lqgv#lqg#y/lh#y#hwdB#					

#

					9#	Z kdw#v#kh#dyd#le#lw# #r#ihul# #ruw# #rx#z dqw#r#udyh#r#kh# J b#l#dqj#v#lqgv#lqg#y#f#h#hwdB#					
--	--	--	--	--	----	---	--	--	--	--	--

Ghikq#r#q##

Ohyh#r# #p sruwdqf#00000# #h#hul# #p sruwdq#7# #p sruwdq#5# #p x#h#p sruwdq#5# #Q#r#p sruwdq# #h#hul# #q#p sruwdq#
Shuirup dqyh#Dhyh#0000008# #h#hul# #d#w#ihg#7# #p#d#w#ihg#5# #p# x#h#d#w#ihg#5# #Q#r#d#w#ihg# #h#hul# #g#v#d#w#ihg#
#

Wkh#v#p s#h#v#l#h#z dv#f#r#q#v#g#h#u#g#v#x#i#f#l#g#w#d#v#d#v#l#h#j#h#d#h#u#k#d#q#63#d#q#g#h#v#v#k#d#q#833#v#d#s#s#u#s#u#b#h#
i#r#p r#v#h#v#h#d#u#f#k#V#h#d#u#d#q#5339#J#h#v#s#r#g#g#h#g#w#l#g#f#o#g#g#h#u#r#g#v#d#q#v#s#r#u#k#v#h#u#/#r#u#h#l#j#q#d#q#g#r#p h#v#f#r#x#u#l#w#/
u#h#s#u#h#q#v#d#y#h#v#i#u#p #k#h#V#x#p h#q#h#s#U#h#j#h#q#f#| #d#q#g#H#d#w#M#d#y#d#S#u#r#y#l#g#f#h#W#u#d#q#v#s#r#u#d#w#r#g#V#h#u#l#f#h#v#/#u#d#y#h#d#j#h#q#w#
d#v#r#f#b#w#r#g#v#r#x#u#l#p #v#h#f#r#u#h#{shuw#l#q#g#v#u#d#q#v#s#r#u#d#w#r#g#h#{shuw#i#u#p #k#q#l#h#u#l#h#v#h#

V#h#f#r#g#g#d#u#l#g#d#w#z dv#r#e#w#l#g#h#g#h#u#p #g#r#f#x#p h#q#w#d#w#r#g#l#g#f#o#g#l#g#j# #u#h#y#l#r#x#v#h#v#h#d#u#f#k#h#v#x#o#/#g#h#z v#f#d#s#l#g#j#v#/
p#d#v#p h#g#l#d#u#f#d#v#/#l#g#q#x#d#d#h#s#r#u#w#i#u#p #k#h#p l#l#w#l# #r#h#W#u#d#q#v#s#r#u#d#w#r#g#l#q#g#e#r#r#n#v#l#g#i#r#p d#q#w#z h#h#l#g#y#r#g#h#g#l#g#
w#k#h#s#u#r#f#h#v#v#r#i#g#h#y#h#o#s#l#g#j#d#q#g#s#u#r#p r#w#l#g#j#r#x#u#l#p #g#h#y#h#o#s#p h#q#w#W#k#h#h#v#h#d#u#f#k#r#e#i#f#w#l#g#f#o#g#g#h#d#f#h#v#l#e#l#w#/#
f#r#g#g#h#f#w#l#w#/#W#u#d#q#v#s#r#u#d#w#r#g#l#g#i#d#v#w#k#f#w#h#/#r#x#u#l#p #s#r#w#q#w#d#o#r#x#u#l#p #g#h#y#h#o#s#p h#q#w#d#q#g#r#x#w#h#d#f#k#r#q#J b#l#dqj#
l#v#l#q#g#/#v#x#p h#q#h#s#U#h#j#h#q#f#|/#H#d#w#M#d#y#d#S#u#r#y#l#g#f#h#

Wk#l#h#v#h#d#u#f#k#r#f#x#v#h#g#r#q#v#x#p h#q#h#s#U#h#j#h#q#f#|/#P#d#g#x#u#l#/#H#d#w#M#d#y#d#v#s#h#f#l#f#d#l# #J b#l#dqj#v#l#q#g#l#s#u#p#d#u#l#
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h#v#s#r#g#g#h#g#w#z#k#f#k#l#v#j#h#d#h#u#k#d#q#63#d#q#g#h#v#v#k#d#q#833#p#h#w#k#h#d#q#d#v#l#h#t#x#l#h#p h#q#w#V#h#d#u#d#q#5339#D#
s#u#r#e#d#l#w#l#v#d#p s#d#j#p#h#w#k#r#g#z dv#k#v#h#g#/#s#u#r#y#l#g#l#g#j#d#q#h#t#x#d#d#r#s#s#r#u#x#q#l#w#l#r#u#h#d#f#k#p#h#p#e#h#u#r#i#k#h#s#r#s#o#l#w#r#g#r#e#h#
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d#q#g#H#d#w#M#d#y#d#S#u#r#y#l#g#f#h#W#k#h#N#u#x#v#n#d#O#Z d#o#l#w#h#v#w#z dv#f#r#g#g#x#f#w#h#g#e#h#w#h#h#q#W#k#h#l#g#h#s#h#g#g#h#g#w#h#y#d#u#b#e#d#v#l#g#W#k#h#
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e#h#o#z#l#

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Wdeh#6##N#u#x#v#n#d#O#Z d#o#l#w#h#w#i#r#u#D#f#f#h#v#l#e#l#w#l# #

Qe1#	Ydubehd#	P h dq#	V lj #
4#	Urdg#ghwz run#	04198#	3/333#
5#	P rghv#r #wudqvrudwlrq#	04177#	
6#	Wudqvsruw#hkldh#	04144#	
7#	Urdg#txddw#	0418:#	
8#	Wudyhd#p h#	3146#	
9#	Wudyhd#frrw#	03146#	
:#	Orfdwlrq#j lwdqfh#	3146#	
;;#	Hdvh#r #dfklhylqj #j rdo#	03146#	
S#ydoxh#		V lj qhlfdq#	

V#r#x#u#f#h#s#u#p#d#u#l#g#d#w#z dv#s#u#r#f#h#v#h#g#k#v#l#g#j#S#V#V#5356#

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#

Wdeh#7##N#u#x#v#n#d#O#Z d#o#l#w#h#w#i#r#u#F#r#g#g#h#f#w#l#w#l# #

Qe#	Ydu#b#e#h#	P#h#d#q#	V#l#j#
4#	Urdg#l#f#h#v#v#	03189#	3/333#
5#	O#r#f#d#w#r#g#v#s#r#u#h#p#l#d#d#	05159#	

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6#	Udlz d #vdlrq#	06 14<#
7#	Dlsru#	05 1<#
8#	Vhdsruw#	03 16;#
9#	Ihu #sru#	3 18 9#
S#ydoxh#		Vljqlifdqw#

Vrxufh#Sup du|#gdw#z dv#surfhvvhg#xvlqj#SVV/#5356#

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D#vdlqxp ehur#:#hvsrqghqw#urp #5#gdw#vrxufhv#z h#h#cvhg/#hdp hq#Wxp hqhs#Ujhjqf|#Wrxu#p #
R iilf#Wxp hqhs#Ujhjqf|#Wdqvsruvdlrq#huylfh#Wxp hqhs#Ujhjqf|#Ujhjrqd#Ghyhosp hqw#Sdlqqlj#Djhjqf|#
Hdw#Mdyd#Suryqfbd#Wrxu#p #R iilf#Hdw#Mdyd#Suryqfbd#Wdqvsruvdlrq#Ghsdup hqw#Udqgrp #vhdifwlrq#z dv#
dovr#Edulhg#xw#Hdw#Mdyd#hjlqdd#Ghyhosp hqw#Sdlqqlj/#Dfdghp lf#v#Dldgh#sbrw#Dvvrflwlrq#Hdp hqw#r#
hghshqghqw#qvw#Wlrqv#lyrqhg#q#Wkh#Wrxu#p #exvlhv#Wkh#hjlqv#Srngduz lv#dqg#Exghvp d,#Wrxu#p #
Exuhdx#Wudyh#djhqw/#Grp hvw#f#dqg#iruhljq#Wrxu#w#Wkh#dujhvw#Wxp ehur#:#hvsrqghqw#z dv#hfrughg#urp #
erw#Grp hvw#f#dqg#iruhljq#Wrxu#w#49,#Wkh#hjp lqglj#z dv#hyhqd#gjwlexhg/#durxgg#7#,#;#hvsrqghqw#dv#
vhhq#g#ljxuh#6#

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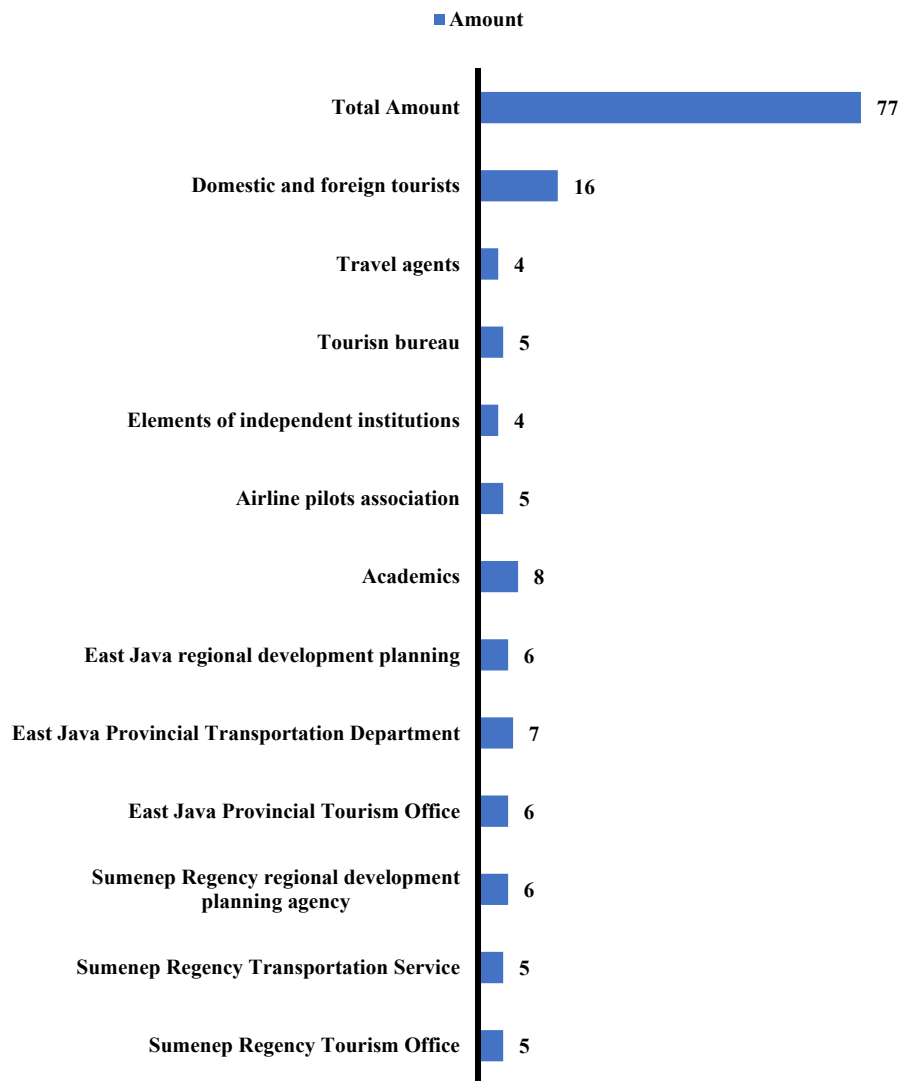
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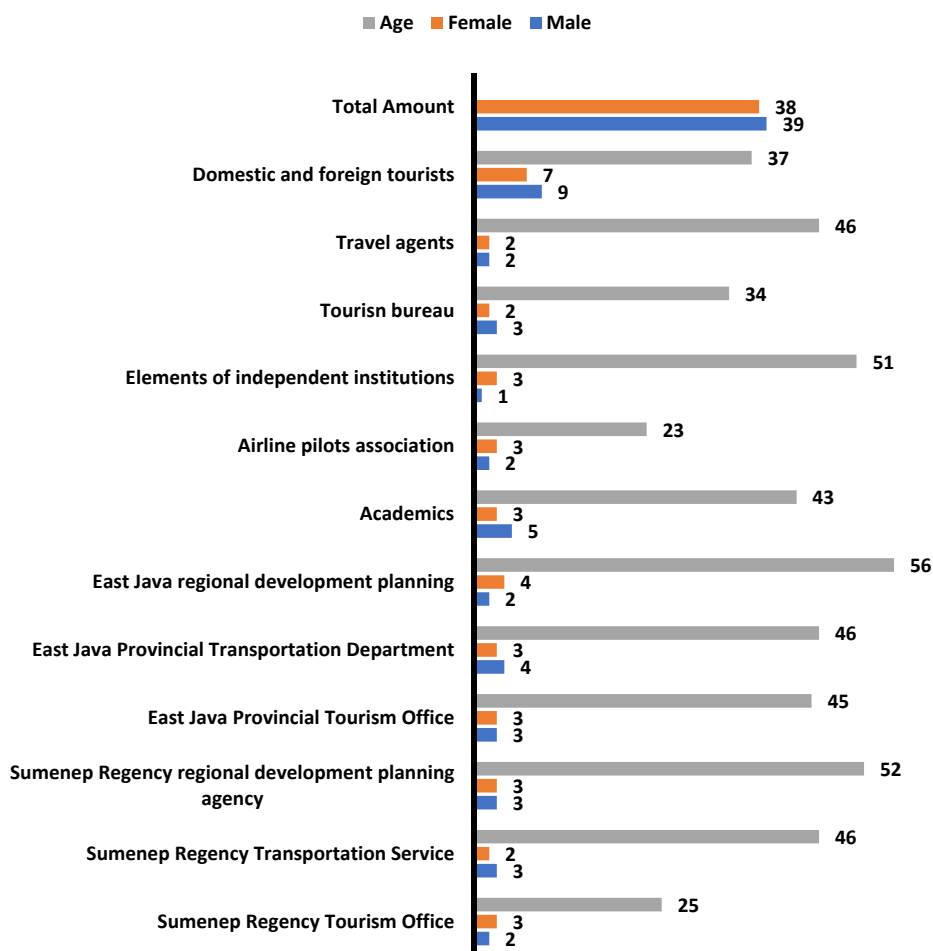
#

Ij xuh# Qxp ehur# Uhsrqghqw#

#

#

Wkh#djh#dgg#jhqghu#frrp srvlrq#r#kh# :#hvsrqghqw#z hnh#{suhvng#dv#r#r#v#p d#d#dgg#hp d#d#
z hnh#yhq#d#d#lv#exwg/#kh#djh#dgg#jhqghu#frrp #56#z#89#hdu#z#lk#p d#r#l#d#w#3#hdu#dgg#deryh#dv#krz q#
lq#Ij xuh#7#



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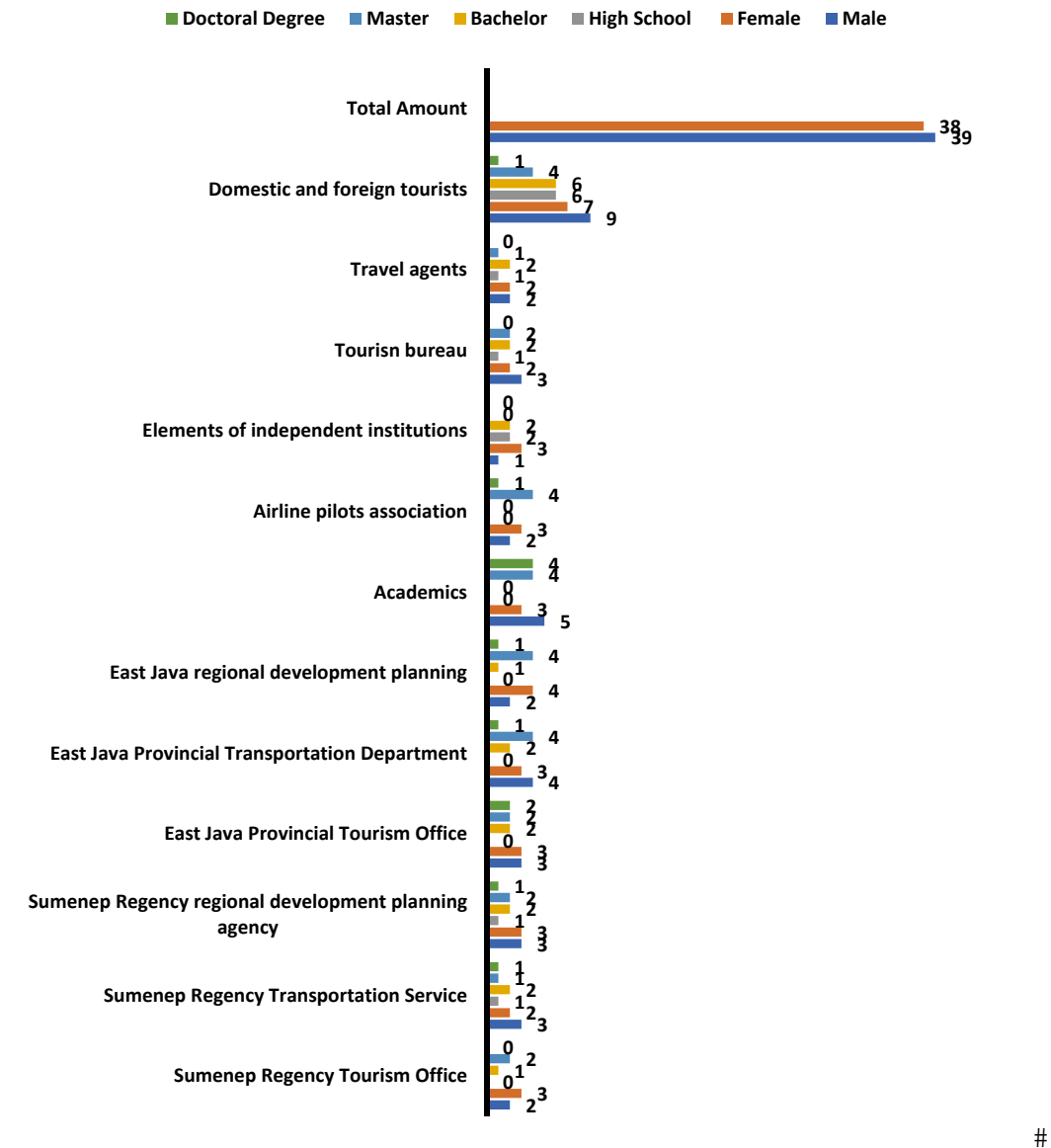
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Ij xuh# Wkh#djh#dgg#jhqghu#frrp srvlrq#r#kh# :#hvsrqghqw#

#

Wkh#hgx#f#d#r#d#frrp srvlrq#r#kh# :#hvsrqghqw#l#f#o#x#g#h#h#g#r#f#w#d#h#j#h#h#p d#w#h#E#d#f#k#h#r#d#l#g#K#l#k#
V#f#k#r#r#d#h#y#h#o#d#v#k#r#z#q#l#Ij xuh#8#Wkh#hgx#f#d#r#d#frrp srvlrq#r#kh# :#hvsrqghqw#z d#v#g#r#p#l#q#d#w#g#e#|#e#d#f#k#h#r#v#d#l#g#
p d#w#h#v#g#h#j#h#h#v#h#x#e#v#h#t#x#h#q#d#K#l#k#V#f#k#r#r#d#l#g#g#r#f#w#d#h#j#h#h#p d#w#h#E#d#f#k#h#r#v#d#l#g#

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#

Ijxuh# #kh#Igxfdwlrq# #Jhvsrqghq#

#

Iq#Wded#7/#kh#p dwl{#krz v#kh#Erqghfwyl# #hwh hq#B#rfdwlrqv#Erqghfwng# # #vhd#lqg# #hu# #s#hu#Wkh#Wkh#vhd#s#hu#dun#Nddqjhw#Vlkerqgr#Mdqjndu#lqg#Vxuded|d/#z k.lh#kh#5#hu# #s#hu#dun#Gxqjnhn#rq#P dgxud#vqlqg#lqg#Edqfap dud#rq#J lhl#dqj#vqlqg#Z khun#kh#Edqfap dud/#Gxqjnhn/#lqg#Nddqjhw#s#hu#z hu#frqghfwng#lqg#vfkhgxdg#z k.lh#kh#vkhw#z hu#grw#

#

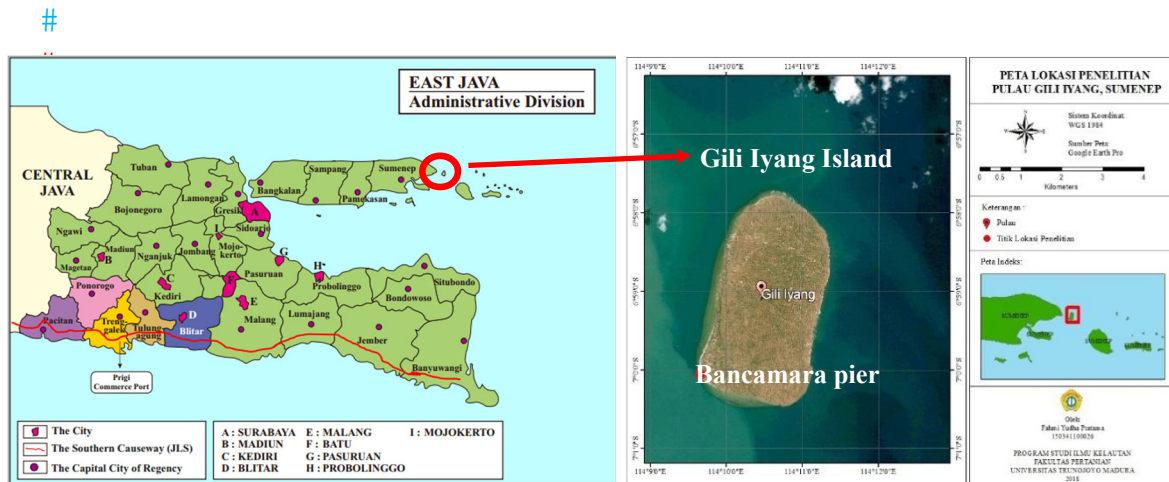
Wded#7##Erqghfwyl#p dwl{#

#	J lhl#dqj#vqlqg# -Edqfap dud# s#hu,#	Grqjnhn#s#hu#	Nddqjhw#s#hu#	Vlkerqgr# Mdqjndu#s#hu#	Vxuded d#s#hu#
J lhl#dqj#vqlqg#Edqfap dud#s#hu,#	4#	4#	4#	3#	3#
Gxqjnhn#s#hu#	4#	4#	3#	3#	3#
Nddqjhw#s#hu#	4#	3#	4#	4#	4#
Vlkerqgr#Mdqjndu#s#hu#	3#	3#	4#	4#	4#
Vxuded d#s#hu#	3#	3#	4#	4#	4#

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J B#|dqj #v#lqg#v#dovr#nqrz q#dv#J B#|dqj /#J B|dqj /#ru#J B#H#lqj I#wk l#vp d#v#lqg#v#arfdwhg#d#wkh#hdw#huq#ws#r#P dgxud#I#v#lqg#dv#vhhg#lg#I lj xuh#9 #Dgp lg lwduwlyhd /#wk#v#lqg#v#lgfoxghg#lg#wkh#Vxp hghs#Ujhjqf |#Gxqxjnhn#G lwulfwz lk#lg#dud#r##k#np 5/#frqvwlqj #r#E dqdu#v#lqg#E dqfdp dud#y#l#lj hv#Vxp du#dw#5348,#



Vrxufh#Sudwp d# #Urp dgkrg/#5353*Su|dp ergr/#5355,#

Ijxuh1# # b# dqj #volog#v#rfdwhg#r#kh#hdw#r#P dgxud#volog#

J 11|dqj #vqlqg/#lor#grz q#iv#R { |jhq#vqlqg/%#dv#qdwuq#rxulp #srhwqdgxh#z#lw#hsruhqd#k#jk#
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jdv#ru#kxp dq#h#h#hyh#v#v#d#rxggdw#rqd#h#p hq#v#ghyhs#bj#k#h#vqlqg#v#d#k#dok#rxulp #ghv#qdw#q#

Wkh#dvhvvp hq#w#r#r#{ |jhq#dyhvw#lqyrgvhp#p xolsd#dj hqf lrv#I hq#p hdxvhp hq#w#e |#wkh#Q dwrqd#
lq#wkwh#r#Dhurqdxwfv#dgg#Vsdh#5339,#hg lfdh#wkdw#r#{ |jhq#dyhvw#r#q#wkh#lvqlg#uhp d#q#z l#k#q#rup d#
frqglrqv#l#53k(|#Wkh#shufhswlrq#r#iuhvk#llu#p#dwulexvng#r#r#kh#devhgf#h#r#llu#r#oxwqdw#K rz hyhu#fdxwlrq#
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lvqlg#l#v#l#k#hdok#r#wulp #ghvwdqdw#r#rd#p#dvhg#r#q#s#x#s#r#u#ng#d#k#l#k#r#{ |jhq#dyhvw#l#t#x#l#h#f#r#p#s#u#k#h#q#v#y#h#
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Fbdqg#dl#frqglwqv#z lk#kjk#r{| |jhq#dyh#w#dargj#z lk#wrxulw#dwdfwlrqv#vxfk#dv#ehdfkhv/#wk#
suhvhqfh#r#p dq|k#rfd#hvhghgw#ryhu#433#hdu#w#g#dgg#kqLxh#fxoxu#r#ihu#j uhdw#srwhqwd#dZ lk#wudwhj lF#
p dgdjhp hq#wlqg#kkrxjkwxdghyharosp hq#w#srvlwqlj#J D#|dqj #dv#dq#Erq lF ghghv#gdlwq#iru#lvwqg#lqg#ehdfk#
wrxulw #krorv#ljqlldqdw#urp lv#dv#wkrz q#q#lj xuhv# #lqag# #



#

Vrxufh##kwsv=2z z z lulexqghz vfrp 2udyh2534<23 ; 252j b0| dqj 0sx0x0j 0vxp hqhs 0ghqj dq0ndgd0
rmvj hq0hwdqj j l0l0grqhvd#

#

I lj xuh#: 1J b#| dqj #lv0qg#kdv#dq#dud#r #< 148#p 5#z lk#d#srsx0wlrq#r #: /; 65#shrs0/#frqvbwqj #r #5#y/0ljhv#
Edqfdp dud#dgg#Edqdu0v/#q#Grqjnhn#G lwulfw#Vxp hqhs#Uhjhqf | /# dgxud/#Idw#Mdyd#Surylfh#Udfkp dz dwl#
5354, #

#

#



#

Vrxufh#kwsv=2adgdumjml0iz dsrvfrp 2pxvdqwdud2985<9357 : 2sx0x0j b0| dqj 0vd0k 0vdw0sx0x0
ghqj dq0ndgd0rmvj hq0huedh0nhgxd0g l0xqld#

#

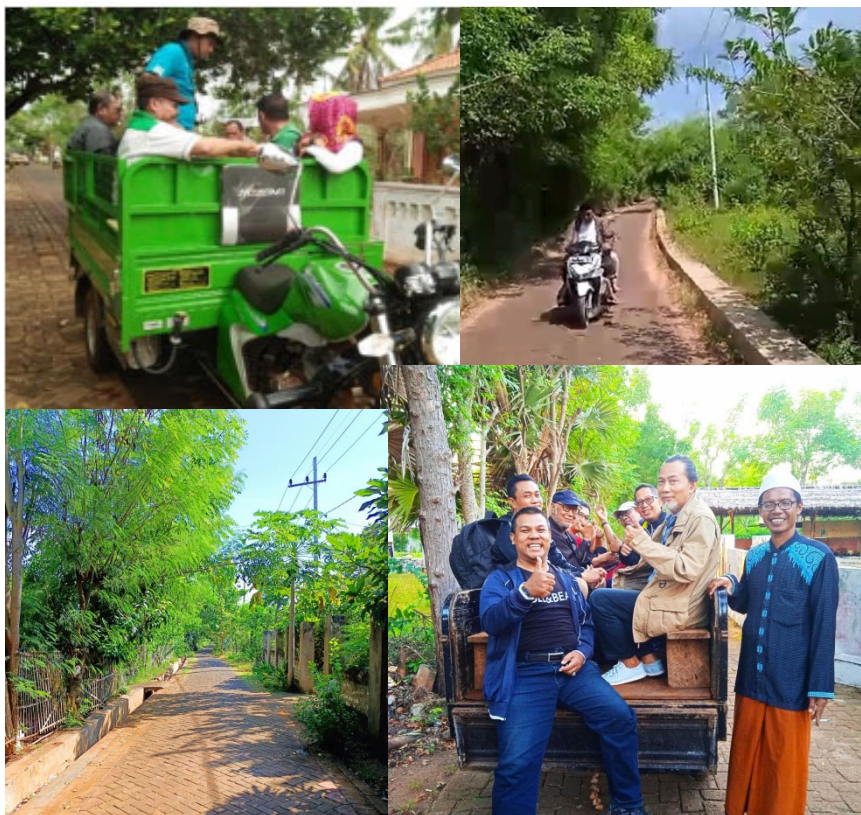
I lj xuh#: 1Wkh#hqfkdqwj #dsshdudqf#r #J b#| dqj #lv0qg#z lk#lw#vwfwk#r #z kln#vdqg#ehdfkhv#q#Vxp hqhs#
Uhjhqf | /# dgxud/#Idw#Mdyd#Surylfh#

#

J b#| dqj #lv0qg#kdv#khsrwhqwd0r#dwdfw#rwr#rphw#f#dgg#qwhuqdwlrqd0r#xulw#Ghyh0rs#lj #d#xddw#
khdok#r#xulp #dud#fdq#srvlw#hd#p sdfw#khs#rfd0#frp p xqlw# #Sudw0p d#) #Urp dgkrq/#5353, 1#Khdok#r#xulp #
vxssrw#khs#Vxp hqhs#Uhjhqf | #J ryhuq hqvw#qj l0wlyh#r#hvwed0k#d#surp lqhqw#j ared0ghwldwlrq/#sup d0b#
gxh#r#khs#lv0qg#v#hdydwng#r { | jhq#0yhor#Wkl#idf0w#vhuylv#r#xulw#vhhn#lj #r { | jhq#khs#d#dgg#r iihw#dq#
hgylrqp hqvr#h0{dwlrq#dgg#h#lxuh#udyh#P xv0k/#5356, 1#

Idf0wlv#r#q#khs#lv0qg#qfoxgh#d#vsd/#vdxqd/#z dnu#dhurelfv/#z dnu#vsrw/#k | shuedulf#r { | jhq#khs#d#dgg#
dgg#qdwud0r#xulp #d0wly#lv#v#xfk#dv#lvk#lj #qj#lj#dgg#hqmr | lj#qdwud0r#hz v#r#frud0wlv#v#khs#hd#ehdfkhv#
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frqvr#xw#Vhwdz dq#) #Hxqnh#Nulw#Mxdwlrq/#5347, 1#Hqkdqf#lj #khs#kdufwhu#r#khs#vsdfh#surylvh#ghwldhg#

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z khhdng#p rwrue lnhv#dgg#wkuh0z khhdng#Y ldu#Wrvvd/#ru#%grgrqj 0grgrqj %yhkIfdv#Wkh#rdg#lqidvwxfwuh#rqvbw#
r#edylqj#p dwhulde l#k#h#z lqwk#i#5,7#p hhwu#



#

#

#

3R q# 1# |d# |d# |k fE# #d# |{ |jhg#s#r# #kh#k#rp hwd |#df1#h#v#kdyh#gr#ehhg#ex#b#k#rur#x#kd #lqg#h#y#qd #
 l#kh#h#ghu#r# #qd #h#du#k#h#E#d#u#t#v# #h# #kh#k#rp hwd |v#kdyh#ehhg#ex#b#v#h#hg#q# #j#xuh#4 #q#k#h#ghu#r#
 z#kdw# #ex#b# #w# #d# |d# |her# #r# #h#w#l# #lqg# #d#q#r#eh#k#v#hg# #r# #h#s#l#j# #h#h#l#k#rp hwd |#h#v#h#hg#q# #j#xuh#5 #
 V#p#l#d# #h#d#f#w#f#l# #h# #w# #p# #h#g#v#l#j# #h#g#h#d#r# #h#kh#k#v#d#j#h# #h#j#x#l#hg# #l#f#h# #h# #h#qd #k#v#hg# #h# #j#k#w# #

#



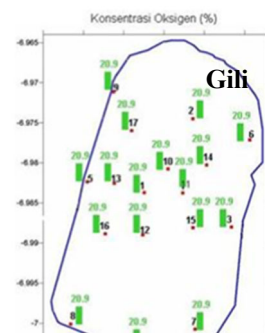
#

Vrxufh=#shuvrqdggrfxp hqw#

#

Ijxuh#41Krp hwd|#exb#phdu#dqul#v#shu#ru#y#v#w#r#wd|#rg#b#l#dgj#f#v#d#g#gghu#f#rg#w#x#f#w#r#g#

#####



4: #

#

#

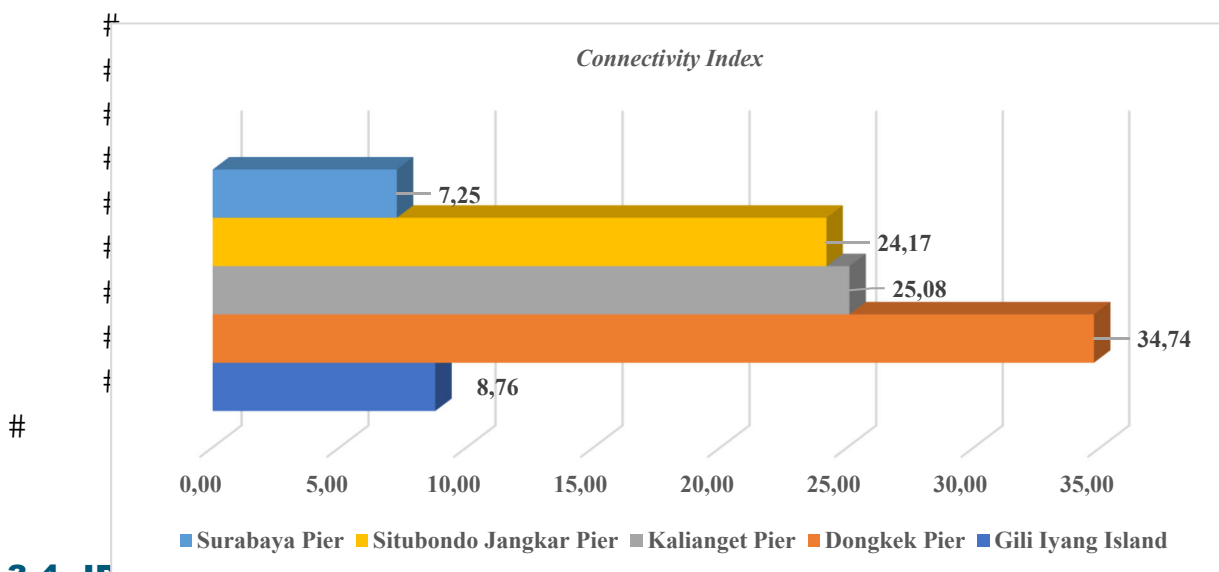
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#

#

3.3. Connectivity Index

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furw#tj#H#j#xuh#46#ehorz#k#krz#v#kdw#hch#Gxqjnhn#huw|#hu#kdv#k#k#ljkhv#Ergqhfwy#l#hyh#d#qgh#{#tjdp#hq#
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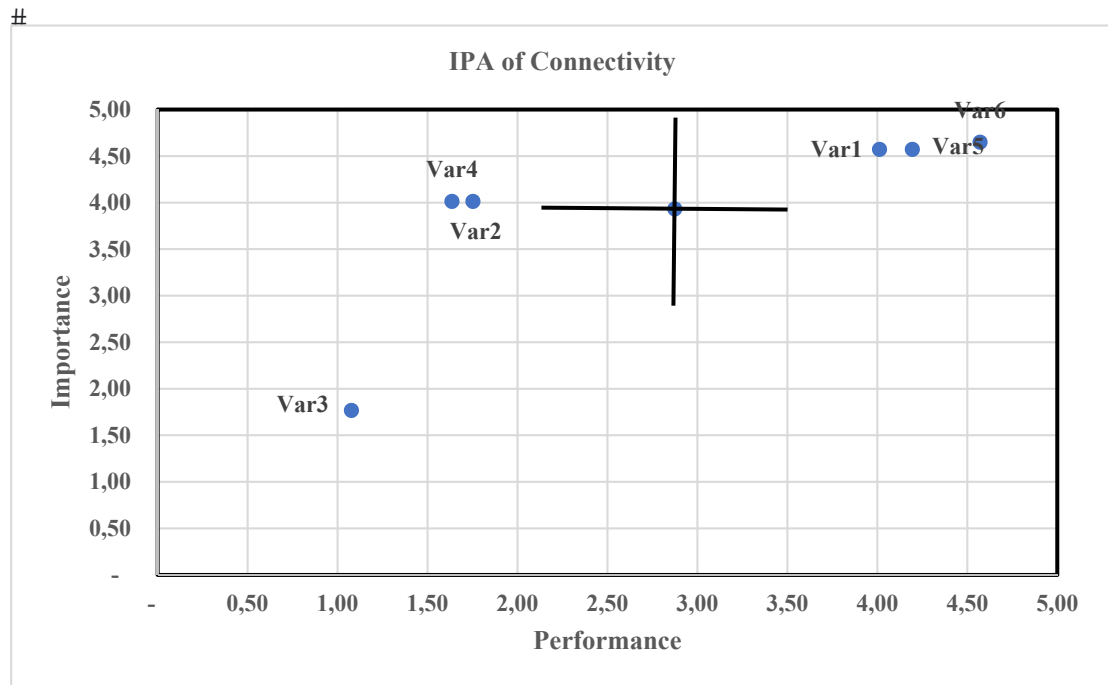


3.4. IP Address Connectivity

Vxp hqhs#Ujhjqf | #z klfk#dv#derxw#59#lvqlgv#ofnv#erp sukhqvlh#frqghfwyW | #hvsfblq#z lk#lw#lvqlgv#duhdv#K rz hyhu#J B# | dqj #lvqlgv#dq#eh#ndfkhg#e | #kls#y#l#Nddqjhw#Kdueru#z klfk#lv#p dgdjhg#e | #kh#jryhuq hqw#ru#e | #hu# | #y#Gxqjnhn#shrsd#v#S hu#p dgdjhg#e | #kh#brfdd#erp p xql# | #DggWlrqda# | #khuh#duh#r#irxuoz khhdg#y#hklf#dv#dyd#led#r#q#J B# | dqj #lvqlgv#kh#rqd#p hdaq#r# #wadqvsruw#lrq#duh#p rwrue#h#v#dqg#shg#fdev#nqrz q#dv#rgrqj Orgrqj #P hdaq kln#z lk#lv#Vxp hqhs#Ujhjqf | #F W | #ydu#rxv#h#frqrp f# | #bgxvwubq#wadgh# | #hvlghqwd# | #rxulv# | #krsslj# | #lqg#j ryhuq hqw# | #hghw# | #duh# | #frqghfwgh# | #d# | #h#w# run# | #r# | #rdgv# | #brfdd# | #xedf# | #wadqvsruw# | #hup | #bdv# | #vuxqm | #r# | #d# | #l#ruw# | #Nddqjhw# | #lqg# | #Gxqjnhn# | #shrsd# | #v# | #hu# | #Kdueru#

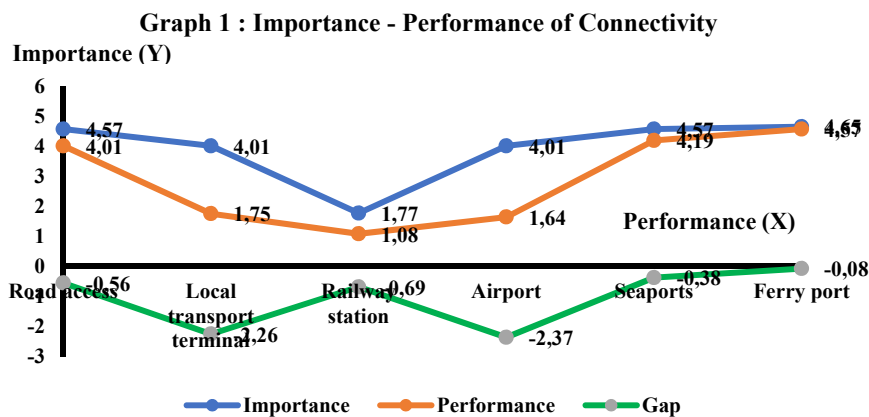
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shuirp l#g#z#h#v#r#wkh|#p#xw#eh#p#dlgwldhg#y#dubed#v#5#dgg#7#duh#l#g#t#xdgudgw#5#l#g#f#dwlg#wkdw#wkh#r#fd#
wdqvsruw#hup#l#dd#dgg#dl#sruw#ru#v#hds#qhv#duh#f#rgvlghu#g#p#sruwg#xw#wkdyh#arzh#shuirp#dgh#eh#f#dxvh#

wkhvh#rup v# #udqvsrudwlrq#gr#grw# hwh{ lw#rq#t b#l# dqj #voldgq# #xukhup ruh/#yduled#6/#kh#dlz d|#wdwlrq/#v#
 lq#t#xdgudqw#6/#vj#q#l# lqj #kdw#hvsrqghqw#frqvghu#l#xq#p srudqw#Wkhuh#hwh/#dwhqwrq#krxq#eh#j lyh#q#r#k#h#
 yduled#v#lq#t#xdgudqw#4#dgg#5/#z k#b#k#rvh#lq#t#xdgudqw#6#dgg#7#fdq#eh#j qruh#g/#dv#k#h|#duh#frqvghu#h#
 xq#p srudqw# #hvsrqghqw#



Ijxuh#7#ISD#ru#rqqhfwy#l#

J u d s k # # p s r u d q f h # s h u i r p d q f h # r u # r q q h f w y # l # / # k r z v # k d w # r q d # k h # h u l # s r u # y d u l e d # s u r g x f h v # k h #
 e h w # j d s # e h f d x v h # # k d v # k h # p d o n v # q h j d w y h # y d o x h # d q g # l v # f o r v h w # r # s r v l y h # h w # 3 B ; # W k l # l q g l f d w h v # k d w # k h #
 i h u l # s r u # y d u l e d # g h p r q w d w h v # k h # e h w # d q g # p r w # f r q v l w h q w # s h u i r p d q f h # J h v s r q g h q w # f r q v g h u g # k h # h u l #
 s r u # d q # p s r u d q w # l q w x p h q w # k d w # k r z h g # k h # e h v # s h u i r p d q f h # z k l b # k h # r w k h u # l y h # y d u l e d v # k d g # o u j h u #
 q h j d w y h # y d o x h v # W k h # p r w # l j q l l f d q w # q h j d w y h # y d o x h v # d u h # i r x q g # l q # k h # y d u l e d v # i r u # r f d o # u d q v s r u # h u p l q d o #
 w d l q # w d w r q v # d q g # l l s r u w # z k l f k # d u h # r w # s u h v q w # r q # t b # l # d q j # v o l d g q # d q g # l w # x u r x q g l j v # R q h # p s r u d q w # d f w r u #
 w # f r q v g h u # v # k h # s u h v q f h # r # l l s r u w # r u z d w u # d f l d w h v # r u # h d s o q h # d j k w #



W d e d # # k r z v # k h # d q d v l # d q g # y d o x d w r q # r # k h # f r q g l r q # r u # t x d d w # l # f r q q h f w y # l # d v # i r o r z v # k h # h y h #
 r # p s r u d q f h # r # f r q q h f w y # l # y d u l e d v # r u # l q g l f d w r u # v # h o w l y h d # k l j k / # z l k # l q # l y h u l j h # r # 6 k 6 / # z k l b # k h # h y h # r #
 4 < #

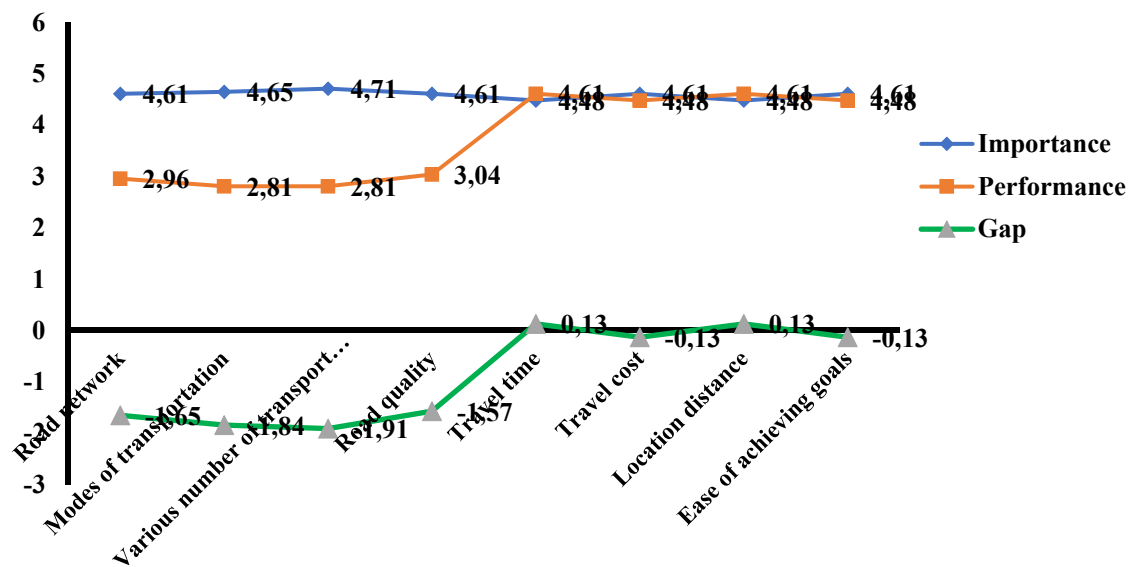
#

Ij xuh#81#SD#ru#ffhvlbw#

J u d s k # # p s r u d q f h # # S h u i r u p d q f h # # r u # f f h v l b w # # k r z v # k d w # # p r q j # k h # # d f f h v l b w # # d u b e d v # # r q d #
w k h # w d y h d # # p h # d q g # a r f d w i r q # g l w d q f h # s u r g x f h g # d # s r v l y h # j d e # / q d p h q # 3 4 6 # g h q r w l q j # k d w # k h # h v s r q g h q w #
f r q v l g h u n g # k h v h # y d u b e d v # # r e h # # p s r u d q w d q g # p x w e h # p d l q w l q h g # w k h # d u j h v w # g h j d w l y h # y d o x h v # d u h # i r x q g # l q #
w k h # r d g # g h w z r u n # / p r g h v # r # w d q v s r u d w i r q # / y h k l f d v # / d q g # r d g # x d d w # y d u b e d v # # z k l f k # g h h g # p s u r y h p h q w #

#

Graph 2 : Importance - Performance of Accessibility



W d e d # ; # e h a r z # v k r z v # k h # d q d d v l # r # w k h # f r q g l r q # r u # t x d d w # r # d f f h v l b w # d v # i r a r z v # k h # d y h d r #
p s r u d q f h # r # d f f h v l b w # z d v # k l j k # / z l k # l q # d y h u d j h # # 7 1 9 3 # z k l b # w k h # d y h d r # # s h u i r u p d q f h # z d v # a r z # / q d p h q #
6 1 : 5 # / h v x o l q j # l j # d # J d s # r # 0 3 1 ; : # z k l f k # l g l f d w n g # w k d w # k h # h v s r q g h q w # s h u w s h f w l y h v # r # w k h # y d u b e d v # z h u h #
v l j q l l f d q w # k r z h y h u # w k h # s h u i r u p d q f h # z d v # a r z # d q g # w k h # d y h d r # d f f h v l b w # z d v # p l p d o # e x w # k h # f r q g l r q v # d q g #
t x d d w # h u h # x s h u r u # r # f r q g h f w l y l # w k h # t x d d w # r # d f f h v l b w # v # h q r z q # e # p h a v x u l q j # g g l f d w r # r u # y d u b e d v #

#

W d e d # ; # p s r u d q f h # # S h u i r u p d q f h # # J d s # # r u # f f h v l b w # #

Y d u b e d # #

p s r u d q f h #

S h u i r u p d q f h #

J d s #

Qe#				
4#	Urdg#ghwz run#	7194#	51<9#	04198#
5#	P rghv#r #wudqvsruwdlrg#	7198#	51;4#	041;7#
6#	Ydrlxv#wudqvsruw#hk lfdv#	71:4#	51;4#	041<4#
7#	Urdg#<xddw#	7194#	6137#	0418: #
8#	Wudyh#<lp h#	7194#	717;#	3146#
9#	Wudyh#<frw#	717;#	7194#	03146#
:#	Orfdwlrq#<G lwdqfh#	7194#	717;#	#3146#
;#	Hdvh#r #<dfk hylhj#jrdw2frqyhqhqfh#	717;#	7194#	03146#
	Dyhudjh#	7193#	61:5#	031: #

Vrxufh#surfhvvhg#iurp #sub du|gdwd/Wxuded|d/5357#

#

I lj xuh#8/#r uds k#5/#l qg#Wdedn# #uhv hq#k k h#r qg l w r q#r u#t x d d w|#r #i f f h v l e l w|#l q d d }h g#l q g#h y d o x d w h g#
d v#i r r o r z v#k k h#h y n d r i#p s r u d q f h#r u#k k h#y d u b e d n v#r u#l g l f d w r u#l w#h u l#k l j k#d w#7 193/#z k l h#s h u i r u p d q f h#l v#r z #
d w#6 1:5/#h v x o l q j#l q l d j d s#r #03 l: #J h v s r q g h q w#r q v l g h u#k k h#l g l f d w r u#r u#y d u b e d n v,, u r d g#h w z r u n/#p r g h v#r i#
w d q v s r u d w i r q/#p x p e h u r i#w d q v s r u#y h k l f o v#r d g#t x d d w/#u d y h o#p h#u d y h o f r w#r o f d w i r q#l w d q f h/#l q g#h d v h#r i#
d f k h y l g j#j r d o#2 f r q y h q l h q f h,, w r#e h#y h u l#p s r u d q w#D o k r x j k#s h u i r u p d q f h#l v#r z #k k h#t x d d w|#r #i f f h v l e l w|#l w#
e h w h u#k d g#k d w#r i#r q a h f w y l w#

#

Dp rqj #k#h#l#j#k#y#d#e#d#v#r#u#q#g#f#d#w#r#i#f#f#h#v#l#b#l#/#u#d#y#h#d#p#h#d#g#g#r#f#d#w#r#g#j#l#w#d#q#f#h#k#d#y#h#s#r#v#l#y#h#
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u#r#g#t#x#d#d#l#/#u#d#y#h#d#p#r#v#w#/#d#g#g#d#h#v#r#/#d#f#k#l#y#l#j#j#f#r#g#y#h#q#l#h#q#f#h#v#k#r#g#g#e#h#p#s#u#r#y#h#g#x#h#w#r#/#k#h#l#h#q#h#d#w#y#h#j#d#s#
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q#l#w#d#q#f#h#/#x#w#e#h#p#d#b#w#d#l#h#q#h#

3.6. Facilities and Infrastructure Development Strategy

Wkhuh#duh#wkuhh#vdnhkr@ghuw#lg#wkh#ghyhosp hqwr#i#vnds@qhv/#z dwhu#wdgvsruw#dgg#olgg#wdgvsruw#
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 wkh#ghyhosp hqw#dgg#frgwxfwrg#r#vnds@qhv#

I l w # r # g h y h o r s # v h d s o l q h v # w k h # F h q w d # J r y h u p h q w # x w # s u r p s w # l q d d # h # h j x o w l r q v # h o w n g # r # w k h #
G u i # U h j x o w l r q v # U S S # r q # Z d w h # D l s r u w # l q w d w n g # l q # 5 3 5 3 # R q # V h s w h p e h u # 9 # 5 3 5 4 # w k h # G l h f w r u # J h g h u d d # r #
F l y # D y d w l r q # l v x h g # G h f u h h # Q x p e h u # N S # 5 3 9 # r # 5 3 5 4 # f r q f h u l q j # W h f k q # f d d # V w d q g d u g v # d q g # R s h u d w l r q d d # F l y #
D y d w l r q # V d i h w # U h j x o w l r q v # S d w # 4 6 # P d q x d d # r # V w d q g d u g # F D V U # S d w # 4 6 # , Y o x p h # U # Z d w h # D h u r g u r p h # W k h #
G u i # D f d g h p # f # S d s h u # i r u # w k h # S u h s d u d w l r q # r # J r y h u p h q w # U h j x o w l r q v # i r u # P d u l p h # D l s r u w # l v # d o r # e h b j #
f r q w l x h g # l v # J r y h u p h q w # U h j x o w l r q v # S S #

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p dwu# #lq#kdw#fryhu#hrrhfdwlr# #s dvhgj hu# #huyfhhgph dgg# #dfbl# #htxlhp hqw# #dfbl# #l#rxw#vdjhv#r# #
ghyharsp hqw# #lqg#qhgvg#dgg#xvh# #z run#hgylrq hqw#duhdv# #hgylrq hqw# #duhdv#r# #bwhwv#dgg# #djk#
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llsrw#lqfoxgh#vdhw# #lqg#hfxul# #dfbl#v# #llwgh#lqg#lqgvlgh#dfbl#v# #llsrw#htxlhp hqw# #z dwu#llsrw#

untxlnp hqw/#xssruwqj#idfblwv#hndv#ihqylrqp hqwd#frqfhuq/#dihw|#rghv#ru#djkw#shudwrv/#lqg#vdiw|#
}rghv#vshfllfdw|ghvj#qdwng#ru#z dhu#llsru#djkw#shudwrv#

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J ryhuqp hqw#hvxow#lq#frqghfwg#z run#surj#udp v#Wkh#lqwhj#udwrv#r#hdfk#srd#|#surj#udp #lv#hdd#|hg#Wkurxjk#
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hvhqwd#l#rrgv#ghghg#e|#kh#frp p xql#|lq#f#og#lqj#gd#l#ghf#hvv#lv#/#xh#q#lqg#h#h#frp p xql#f#dwrv#h#vrxufhv#
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Odqg#v#d#q#v#s#r#u#d#w#r#q#idfblwv#d#qg#l#q#l#dw#v#f#w#h#d#h#d#v#r#h#v#h#q#v#d#l#r#u#Wkh#ghyharsp hqw#r#J l#l#|dqj#
lv#lqg#W#v#d#q#v#s#r#u#d#w#r#q#p rghv#h#krx#g#eh#l#q#d#s#w#h#z#r#kh#k#q#l#x#h#f#k#d#u#f#w#u#l#w#f#v#r#kh#h#lv#lqg#v#h#u#d#l#Wkh#p rvw#
frp p r#q#l#d#l#v#d#q#v#s#r#u#d#w#r#q#l#q#f#og#h#v#z#r#o#z#k#h#h#o#g#p r#v#r#e#h#h#v#l#q#g#k#u#h#o#z#k#h#h#o#g#l#u#r#u#Wrv#d#l#w#sh#y#h#k#f#d#v#/#
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h#v#h#q#w#l#

D#v#p#d#o#h#h#f#w#l#f#O#r#z#h#u#g#y#h#k#f#d#v#z#l#k#d#l#p#d#{p#x#p#f#d#s#d#f#l#w#r#h#r#x#u#s#d#v#h#q#j#h#u#h#v#x#l#d#e#h#ir#h#x#u#k#h#
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udqj#lqj#l#p#r#p#h#h#u#z#l#h#h#l#l#y#h#q#Wkh#h#q#y#l#r#q#p hqwd#frqg#l#w#r#q#v#r#q#J l#l#|dqj#lv#lqg#z#k#l#f#k#d#v#k#l#k#{|j#h#q#
d#y#h#o#l#x#h#r#kh#h#e#v#h#q#f#h#r#l#q#g#x#v#u#l#d#s#r#o#x#w#r#q#l#q#g#r#v#l#l#x#h#o#e#d#v#h#g#p d#q#x#i#d#f#w#u#l#j#/#h#d#f#w#l#f#y#h#k#f#d#v#k#d#y#h#h#h#q#
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z#k#l#f#k#h#v#l#f#k#l#q#j#h#h#q#h#l#lqg#h#j#h#v#d#w#r#q#

4. CONCLUSION

lq#frqf#ox#l#r#q#/#kh#d#o#k#r#x#u#l#p#k#d#v#ehh#q#h#s#r#u#h#g#r#r#k#u#y#h#z#l#k#l#q#g#r#q#h#v#l#v#d#u#f#k#l#h#o#l#j#f#o#l#q#v#f#d#h#/#
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srhqw#d#l#lqg#v#p#h#q#h#s#Ujh#q#f|#q#h#d#w#Mdyd#Surylqf#h#k#dv#l#f#w#g#l#v#l#s#l#r#q#h#u#l#q#s#urp r#w#l#j#kh#d#o#k#r#x#u#l#p#Wkh#l#
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p rghv#v#l#q#h#i#h#f#w#y#h#v#w#d#h#j#|h#r#u#l#g#y#d#q#f#l#j#kh#d#o#k#r#x#u#l#p#

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h#d#f#k#l#j#h#l#l#|dqj#lv#lqg#r#Wkh#h#v#h#f#w#h#t#x#l#l#j#l#w#h#q#w#r#q#l#q#g#p#suryhp hqw#l#q#f#og#h#h#{s#d#q#l#j#r#d#g#l#h#w#z#r#u#v#/#
l#q#f#u#d#v#l#j#v#d#q#v#s#r#u#d#w#r#q#p rghv#suryl#j#l#j#p rghu#q#y#h#k#f#d#v#/#d#q#g#h#q#v#x#u#l#j#k#l#k#o#x#d#d#l#h#r#d#g#v#Dgg#l#w#r#q#d#l#/#
p#d#l#q#v#l#l#j#frqghfwy#l#|Wkurxjk#h#d#v#|h#r#d#g#l#f#h#v#v#l#q#g#Wkh#s#u#h#v#h#q#f#h#r#h#v#h#d#l#q#g#h#u#l#s#r#w#l#v#h#v#h#q#v#d#l#Wkh#
ghyharsp hqw#r#l#lqg#v#d#q#v#s#r#u#d#w#r#q#l#q#l#dw#v#f#w#h#v#x#f#k#l#v#u#l#j#v#d#w#l#q#v#d#w#l#q#v#d#q#g#r#f#d#d#v#d#q#v#s#r#u#d#w#r#q#h#u#p#l#q#d#v#/#
d#v#r#h#frp p h#q#h#g#

R wkh#hfrp p hqghg#vroxwlrqv#lqfoxgh#4, #ghyharslj #frp p xqlw#sduwflsdwlrq/#frp p xqlfdwlrq/#dgg#
p hglb#frqyhujhgf#5, #frwderudwlgj #z #k#fkrroqg#hgxfdwlrqde#lqvwkwrq#rxu#j xlgjhvkqghu#kxshuyvlrq#
r#kxh#hdv#dyd#surylqf#rxu#p #lqg#f xoxuh#R iifh#6, #sduqhubj #z #k#rxu#p #lqg#kdgg#fudiw#hfwruw#r#wudlg#
wxu#j xlgjhvk#khdok#rxu#p #7, #frwderudwlgj #z #k#kxh#p dgljhvr#r#exlg#lq#qwhuqdwlrqde#khdok#rxu#p #jhwz run#
+8, #surp rwbj #khdok#rxu#p #lqg#z runlj #z #k#kxh#sulydw#hfwruw#r#r#uj dql#h#rxu#p #lqg#{klewlrqv#9, #lqwhj udwlgj #
hfrwrxu#p #z #k#k#l#r#fxv#r#q#d#wuh#:#, #lqwhj udwlgj #kxh#qwhup rgd#wudqvsruw#wlrq#jhwz run#r#hdsolqhv/#hdsruw/#
z dwhu#wudqvsruw#wdgg#dgg#wudqvsruw#wdgg#+, #ghyharslj #hgylrqp hqwdw#iuhggd#dgg#yhhk#fdiv#srz hulg#e|#
hdfwulfw#lqg#surklewlgj #kxh#hwdedwkp hqwr#i#dfwruhv#lqg#lqgxwuhv#kdw#f#rxg#surgx#fh#z dwh#

CONFLICT OF INTEREST

#

Wkh#kxwruw#ghfduh#qr#frqidfwr#i#qwhuhvw#

REFERENCES

#

Edkxnhdqj #W#V1#Kxehlv#P 1#) #Wublnvdql#Z 1# +534<, #Dqddv#Gdp sdn#Sduz lvdw#Edkdu#Whukdgs#
Nhvhmkwhuddg#P dv#dundw#Vhnlwdu#Mxuqdg#P dqdmp hq#Shqjhp edqjdg#lqgxwul#Nhfl#P hqhqj dk/#47+5, #/
485, 48<1#kwsv=2grlruj 2kws=2grlruj 2435<5772p hp 14751485048<#
Edwkedu#M#534:, #Sdudgljp d#Shghdldqg#Nxdadw#lqgdq#I lvdidw#lq x#Shqjhwkxdq#gddp #Nrqvhdqj 1#Mxuqdg#
Irxv#Nrqvhdqj #5+5, #k8, 43: #kwsv=2grlruj 2kws=2grlruj 2#35996; 2in16; : 53<<#
Exglukd/Q #5344, #Shudqdg#Wudqvsruw#Gdwp #Sduz lvdw#Vwg#Ndvxv#Shp lkdq#Gdhudk#Wmxmdq#Z lvdw#
+Gwz Ghvwdqdl# Rdk# Z lvdwz dq# G# Edd# Mxuqdg# lq ldk# Whnqjh# Vslb# 48+5, # 4<8, 537#
kwsv=2grlruj 2kws=2grlruj 2435532333; 87; 9336: 3376#
Fkhd/#V1#U xuqj #U #R 1#V1#U dp dq/#E 1#) #Vhp lq#534; , #Wrxu#p #Ghyharsp hqwr#U b#l#dqj #vdlqg#edvng#r#q#
Eoxh# Hfrqr#l# Wkh# 6ug# lqwhuqdwlrqde# Frqihuhgf# r#q# Pduqh# Whfkqraj#l# 6: , 76#
kwsv=2grlruj 2435532333; 87; 9336: 3376#
Ghdqr# #U #533: , #Vxp ehufd#d#D lq#Z lq#dk#shvlvl#lqdg#SxwxSxwx#Nhfl#lq#lqgrqhvl#DISI#shvv#
Gmxqduwul#H1#Udkp d#D 1#) #Qxvdqwdw#F #D #G #V #5354, #Dqddv#r#i#unglfwlrq#r#hnd#hynqulh#p sdfw#edvng#
rq#lqdg#dxjh#lqg#lqdp hwl#vdwhw#h#r#q#dgg#fryhu#hnd#r#Vdsudx#vdlqg#P domx#lqgrqhvl#R S#F rqi#
Vhuhv#Hdwk#lqg#lqylrqp hqwdw#flhgf#/#<: #kwsv=2grlruj 243143; ; 21: 88046482: <: 2124535: #
HVFDs# X# Q# +5347, #Uhljrqd# Frqghfwylw# iru# Vkdhg# Survshulw# Xqlhg# Qdwlrqv#
kwsv=2z z z lqghvds lruj 2lwhv2ghidw2lhw2JFVSblqwgxfwlrqlsg#
I lxx#D #D 1#Kdlg# #1#Kxp dqj #Z #S1#) #Qdwlv#U #5355, #Dssdfdwlrq#r#Wkh#SSS#Vfkhp h#r#q#Wkh#Wrxu#p 0
Wudqvsruw#wlrq#F dvh#Vwg#l#Wkh#Frqfhw#r#Sdars#F l#Wrxu#p 1#Mxuqdg#Shqd#Whnqjh#/: +4, #65, 7; #
kwsv=2grlruj 2kws=2g {lgrlruj 24318488: 2sbrlwy: 14144<#
Jkdql# #D #534: , #Shqjhp edqjdg#Vdudqd#Sudvudqd#Ghwldqv#Sduz lvdw#Ehuedvl#Exgd#d#H#Mdz d#Eduw#
Mxuqdg#Sduz lvdw#/#7+4, #5, 64 #kwsv=2grlruj 2kws=2g {lgrlruj 2431645<72sduy71414: <; #
Jkdql# #D 1#) #Eudkp dqwr#H #5348, #Shqj duxk#lqgydv#Vdudqd#Sudvudqd#Whukdgs#Nhsxdvdq#Shqj xqmxqj #G #
Renm# Z lvdw# Nduqjvhud# Z dwhuqg# Mxuqdg# Sduz lvdw#/# 5+5, # <; , 443#
kwsv=2grlruj 2kws=2grlruj 2431645<72sduy5513<#
J ud#l#U #5356, #G lihuhq#W #shv#r#vdlqg#0#Z #k#H {dp shv#kwsv=2z z z lkhgdl#hfrf#rp 2glhuhq#W #shv#rio
vdlqg#Z lkh# {dp shv#07: <1kp &dqfkrub3#
Kdvdqdk# #1#5353, #Ndudnwuhw#h#Z lq#dk#Gduwlg#dq#Shudldq#G #lqgrqhvl#Mxuqdg#U hrjudl#53+46, #4, 9#
lqgubvwxw# #1#V lnd#Vxid#D 1#Ghvhp ehufd#K 1#) #U #l# #/# #G #5353, #Shudq#Nrp xqhdv#Nhoxduj d#Whukdgs#
Shublx#Dqdn#Vwg#lqwhuqdgj #shuxedkdq#Shublx#Vudqvj hqghu, #Mxuqdg#qwhu#Nrp xqlhd#/#5, #4, 46#
Mdp hl#H1#Fkdq#P 1#F kdx#K #Z 1#U dlh#H1#) #D2w#p dq#N #5355, #Shufhlyhg#D fhwvlebw#lqg#N#l#lqixhqlqj#
Idfwruw# lq# Wudqvsruw#wlrq# Vxwldqdebw#/# 47+4: , # 43; 39#

kwsv=2grlrj kws=2g {1grlrj 2431649352lvly914756 : #
Vddp /\$1# #/ddp /# 1#5335,1#Ndp xv#cdkdvd#qgrqhvld#Nrqnwp srhu#6ug#hg1,1#P rghuq#Hqj dkk#Suhvv#
Vdwk.hggudnxp du/#U1#) #Wlvghq#F 1#4<;<,1#Wrxulvp #dgg#kh#Hfrqrp If#Ghyharsp hqw#r#kh#P dgl yhv#Dqgdov#r#
Wrxulvp #Jhvdufk/#49+5,/#587,59<1#kwsv=2grlrj kwsv=2grlrj 24314349234930:6;6+;<, <33:40#
Vhndudq/#K 1#5339,1#P hwrgrarj 1#Shghdwdq#xqwn#E lvqlv#Vdmp ed#Ip sdw#
Vhwdz dq/#1#) #Hxqhh#Nulw#Mxdwlrqr/#V 1#5347,1#dvldv#Z lvdw#Nvhkdwdq#g 1#Sxwx#J b#|dqj /P dgxul#Mxuqdc#
HG p hqv#Dwlvhnwuy/#4,/#:7,4;41#kwsv=2p hgldlghdwlfrrp 2p hgld2xedfdwlrqv24;<7;:0G 0idvldv0z lvdw0
nhvhkdwdqGj0sxwx0j bsg#
Vkdeuqd/#Q 1#Duldqr /G 1#Z dugdql#N 1#V 1#I rqlw/#1#/vsdggbul/#D 1#U 1#K du|dqr /J xwdp 1#Q 1#I 1#) #P dqw4 /#P 1#I 1#
+5356,1#Vhvlrq#Dvvhvvp hqw#r#Vhdsolqh#R shudwlrqv#Wkh#F dvh#r#P dubh#Wrxulvp #Ghyharsp hqw#r#q#J b#
I|dqj #lvollg /#qgrqhvld#R S#F rqi#Vhuhv#Hduk#lqg#Hqylurqp hqwd#V fhqfh1#kwsv=2grlrj 243143; ;24:880
46482499242345383#
Vp dp rud/#K 1#5337,1#P dqdmp hq#Vxp ehufgd|d#P dqxvbl#E dj lq#Shqhuelwq#VWIH# SNQ #
Vxgduqr/#Vhwrubql#I 1#D 1#) #Vxsudswr /#K 1#5344,1#Hhnwylwv#Hnvwdn#Gdxq#P hqlldq#Sk |ollgwv#pxuxul,#vhedjd#
Dqwednwhul#HgZ dwlhw#wdugd#Vhfdud#Iq#Y lwr1#Mxuqdc#Iqp b#k#Shuhdqdq#Gdq#Nhwxwdq/#6+4,/#436,43; #
kwsv=2grlrj kwsv=2grlrj 2431537:62lsnly6144964#
Vxp du|dw#1#5348,1#Ndrldq#Srwqvl#Z lvdw#Nvhkdwdq#R nvlj hq#G 1#J b#I|dqj 1#E hulw#G lj dqwdud/#49+5,/#;6,<3 #
kwsv=2xugddolsdqj rlg2qgh {1sks2ehulwbg lj dqwdud2lwlf d2ylhz 25:725393#
Yxdylf/#D 1#5349,1#D ffhvvlw| #frqfhsw#lqg#lqglfdrw#lqg#wdqvsruwlrq#wudwhj If#solqqlbj #lvxhv#khruhwlfd#
idp hz run#lqg#bhuwkuh#hyhz #Drj lwlfv# #Vxwldqdeh#Wudqvsruw#:#4,/#B; ,9: 1#3148482wv0534903339#
Z dusdql/#V 1#534: ,1#Inrqrp 1#Shqjdqjnxwdq#Nshd#Suhvv#
Z lvrqr/#D 1#D qhndz dw/#D 1#) #Dqqlvd/#V 1#5354,1#Ndgdu#R nvlj hq#Whuedlh#Vhedjd#Gd|d#wduh#Z lvdw#Nvhkdwdq#
Sdgd# Sxwx# J b# I|dqj # Mxuqdc# Shuirp dqfh/# 44+4,/# 96,:7#
kwsv=2grlrj kwsv=2g {1grlrj 243157<5<2he ly441464 : #

#