Device	Interface	IP address	Default Gateway	
Arkham Island	FA0/0	10.10.30.1/23	N/A	
	SE0/0/0	10.10.32.26/29	N/A	
	SE0/0/1	10.10.32.41/29	N/A	
City Hall	FA0/0	10.10.0.1/20	N/A	
	SE0/0/0	10.10.32.42/29	N/A	
	SE0/0/1	10.10.32.34/29	N/A	
East End	FA0/0	10.10.16.1/21	N/A	
	SE0/0/0	10.10.32.25/29	N/A	
	SE0/0/1	10.10.32.33/29	N/A	
	SE0/1/0	10.10.32.10/29	N/A	
	SE0/1/1	10.10.32.18/29	N/A	
Financial District	FA0/0	10.10.34.1/23	N/A	
	SE0/0/0	10.10.32.17/29	N/A	
Crime Alley	FA0/0	10.10.24.1/22	N/A	
	SE0/0/0	10.10.32.2/29	N/A	
	SE0/0/1	10.10.32.9/29	N/A	
Diamond District	FA0/0	10.10.28.1/23	N/A	
	SE0/0/0	10.10.32.1/29	N/A	
PC0	N/A	10.10.30.2/23	10.10.30.1	
PC1	N/A	10.10.30.3/23	10.10.30.1	
PC2	N/A	10.10.34.2/23	10.10.34.1	
PC3	N/A	10.10.34.3/23	10.10.34.1	
PC4	NA	10.10.24.2/22	10.10.24.1	
PC5	NA	10.10.24.3/22	10.10.24.1	

PC6	N/A	10.10.28.2/23	10.10.28.1
PC7	N/A	10.10.28.3/23	10.10.28.1
PC8	N/A	10.10.16.3/21	10.10.16.1
PC9	N/A	10.10.16.2/21	10.10.16.1
PC10	N/A	10.10.0.2/20	10.10.0.1
PC11	N/A	10.10.0.3/20	10.10.0.1

## City Hall District

#### Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.0.1 255.255.240.0

Router(config-if)#no shutdown

#### East End

#### Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.16.1 255.255.248.0

Router(config-if)#no shutdown

## Crime Alley

#### Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.24.1 255.255.252.0

Router(config-if)#no shutdown

#### **Diamond District**

#### Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.28.1 255.255.254.0 Router(config-if)#no shutdown

Arkham Island

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.30.1 255.255.254.0

Router(config-if)#no shutdown

Financial District

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.34.1 255.255.254.0

Router(config-if)#no shutdown

## City Hall District

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.42 255.255.255.248

Router(config-if)#no shutdown

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.34 255.255.255.248

Router(config-if)#no shutdown

East End

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z. Router(config)#interface serial0/0/0 Router(config-if)#ip address 10.10.32.25 255.255.255.248 Router(config-if)#no shutdown

#### Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z. Router(config)#interface serial0/0/1 Router(config-if)#ip address 10.10.32.33 255.255.255.248 Router(config-if)#no shutdown

#### Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z. Router(config)#interface serial0/0/0 Router(config-if)#ip address 10.10.32.10 255.255.255.252 Router(config-if)#no shutdown

## Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z. Router(config)#interface serial0/0/0 Router(config-if)#ip address 10.10.32.18 255.255.255.248 Router(config-if)#no shutdown

### Crime Alley

## Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z. Router(config)#interface serial0/0/0 Router(config-if)#ip address 10.10.32.2 255.255.255.248 Router(config-if)#no shutdown

#### Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z. Router(config)#interface serial0/0/0 Router(config-if)#ip address 10.10.32.9 255.255.255.248 Router(config-if)#no shutdown

#### **Diamond District**

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.1 255.255.255.248

Router(config-if)#no shutdown

#### Arkham Island

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.26 255.255.254.248

Router(config-if)#no shutdown

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial0/0/1

Router(config-if)#ip address 10.10.32.41 255.255.254.248

Router(config-if)#no shutdown

#### **Financial District**

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial0/1/0

Router(config-if)#ip address 10.10.32.17 255.255.255.248

Router(config-if)#no shutdown

#### Static route

Arkham Island

Router(config)#ip route 10.10.16.0 255.255.255.248 serial0/0/0

Router(config)#ip route 10.10.0.0 255.255.255.240 serial0/0/0

City Hall District

Router(config)#ip route 10.10.30.0 255.255.255.254 serial0/0/1 Router(config)#ip route 10.10.16.0 255.255.255.248 serial0/0/1

East End

Router(config)#ip route 10.10.0.0 255.255.255.240 serial0/0/1 Router(config)#ip route 10.10.30.0 255.255.255.254 serial0/0/0

## Dynamic route

#### **Financial District**

Router>en

Router #config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#router rip

Router(config-router)#version 2

Router (config-router)#no auto-summary

Router (config-router)#network 10.10.32.16

Router (config-router)#passive-interface Fa0/0

Router (config-router)#exit

## Crime Alley

Router >en

Router #config t

Enter configuration commands, one per line. End with CNTL/Z.

Router (config)#router rip

Router (config-router)#version 2

Router (config-router)#no auto-summary

Router (config-router)#network 10.10.32.8

Router (config-router)#network 10.10.32.0

Router (config-router)#passive-interface Fa0/0

Router (config-router)#exit

## **Diamond District**

Router>en

Route r#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router (config)#router rip

Router (config-router)#version 2

Router (config-router)#no auto-summary

Router (config-router)#network 10.10.28.0

Router (config-router)#passive-interface Fa0/0

Router (config-router)#exit

# **VLSM Table**

Host Name	Hosts No	Ip	Given	Host Bit	Network Bit
City Hall District (A)	1024	1026	4096	12	20
East End (B)	522	524	2048	11	21
Crime Alley (C)	312	314	1024	10	22
Diamond District (D)	230	234	512	9	23
Arkham Island (E)	160	162	512	9	23
Financial District (F)	128	130	512	9	23
WAN1	2	4	8	3	29
WAN2	2	4	8	3	29
WAN3	2	4	8	3	29
WAN4	2	4	8	3	29

WAN5	2	4	8	3	29
WAN6	2	4	8	3	29

## **VLSM Tree**

