f. Figure 10.2 shows the allocation of several areas and the special backbone Area ID of 0.0.0.0.

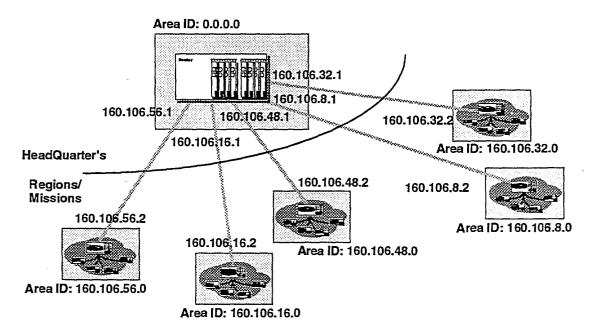


Figure 10.2: OSPF Backbone Area and Regional Area

## 10.3 OSPF Link Metric

- a. The WAN facilities between the region and the mission will be strictly point-to-point and therefore only one path is available. However between regions and headquarters several alternate paths, for redundancy purposes, are available for traffic flow and therefore a least cost metric is useful in determining the proper path.
- b. The OSPF routing protocol provides network administrators the facility to associate costs with each router LAN/WAN link. The OSPF routes are determined via a least cost method. Several factors can be used for a costing metric including delay, bandwidth, volume of traffic, or a dollar cost for the leased line. With MITNET provided links the cost metric can be determined as a function of bandwidth to ensure that the higher bandwidth facilities are utilized.