function [z, out] = ClusteringCost(m, X)

% Calculate Distance Matrix

d = pdist2(X, m);

% Assign Clusters and Find Closest Distances

[dmin, ind] = min(d, [], 2);

% Sum of Within-Cluster Distance

WCD = sum(dmin);

z=WCD;

out.d=d;

out.dmin=dmin;

out.ind=ind;

out.WCD=WCD;

end