Lab 7.

Congratulations!
You have been hired by SpaceFlex Co. International to provide a localization strategy for the company’s new production plant in South Africa. We’re happy to have you on board!

The company wants to move parts of its productive capacity from the United States to South Africa due to the high levels of wages and other factor of production in the US. Unfortunately, nobody in the company is really familiar with South Africa, nor has anyone any knowledge of GIS, and that’s where you’re entering the picture. Your job is to find the optimal location for the new plants, using your GIS skills.

The South African branch will consist of two plants, preferably located close to each other. The first plant will produce components for tanks and other heavy military vehicles for the North Corean army, which is a really heavy and bulky produce, requiring that the plant be located close to a railway connected to the larger South African railway network. This industry also relies on a great deal of labour power, which means the plant should be located in an area with access to cheap labour. Furthermore, the company leadership, having read its economic geographical theory, emphasizes the importance of the existence of a local ‘industrial atmosphere’ which basically means there should be other industry of roughly the same kind located somewhere close.

The second plant, on the other hand, is in a more of a technology intensive business. They produce customized palm computers and other microtech devices on a small-batch basis. Labour cost is not so important as the availability of educated and skilled labour and of producer services provided by a nearby business environment.

Still, the company wants the two plants close together because share the same marketing division and personnel administering unit.

For the purpose of your job, the company has bought spatial data and spatially referenced statistics on South Africa cheaply from an acquaintance in the Israeli intelligence service, and you can download this from Z:\GIS\modul4. This source also, for some reason, decided to share with you his knowledge that the South African government is planning a new international airport at $27^\circ 5'35''E, 26^\circ 58'20''S$

Your report should be in the form of a set of maps, showing clearly which indicators have been used and which of them are being satisfied by each of the location alternatives that you have picked out for presentation and further consideration by your superiors.

Good luck!