

SUMMARY OF MASTER'S DISSERTATION

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<p>Title</p> <p style="text-align: center;">Systems Engineering Approach for Enhancement of Local City Attractiveness in Japan</p>			
<p>Abstract</p> <p>Most of Japanese local cities are losing populations rapidly today. Younger generations are leaving local cities. Therefore society is facing serious aging problem. Not quite a few local cities are exhausted.</p> <p>There are various studies on local city issues, especially on housing, living and public transportation. Even though Japan faces nationwide depopulation issue, the author still believes that it is possible for local cities to enhance its attractiveness regardless of depopulation and urban sprawl. The author assumes that the attractiveness is enhanced by integration of residential area so that the city can be more compact. Therefore, it is not enough to consider only housing, living and transportation issues in order to explain the mechanism of population increase in the cities. The purpose of this study is to propose effective measures to make local cities more active by enhancing its attractiveness. The author focuses on considering increase and decrease of local city population. The approach is obviously different from the previous studies, which mainly pay attention to housing and living issues.</p> <p>In the analysis, the author introduced systems engineering approach for “visualization” and “factors analysis” of the problem. Mind map, fish bone diagram and covariance structure analysis are utilized effectively. As a result, the author figured out the relative importance, causality and priority among the impact factors which affect attractiveness of local cities.</p> <p>The author picked up some practical measure for enhancement of local city attractiveness and examined the effectiveness of each measure considering similar practical application examples. As a result, the author figured out that economic aspect has greater impact on the local city attractiveness than the others. Therefore, the author concluded the following four measures are beneficial;</p> <ol style="list-style-type: none"> 1. Focusing on economic aspect of local city attractiveness (e.g. job security, etc.), especially for working generation 2. Stopping birthrate declining 3. Improving urban transport system (e.g. Independence from car transportation) 4. Maintaining population density by designing a local city more compact against unavoidable depopulation <p>In concluding, it is true that people tend to count attractiveness of local cities on urban streetscape and scenery. However, what is more important for the attractiveness is the fact that local residents have secured jobs and thus can afford their living stably. In other words, economy of the local city must be active and stable. In addition, it is also necessary to maintain social environment in which families can spend their life and give birth and raise children without problems. Furthermore, the result shows the importance of public transport system which is independent from car. Keeping a city compact is also an effective measure as well. These measures contribute not only to enhance the attractiveness as a workplace but also encourage people to give birth and raise children in the local cities.</p>			