

**PUSAT SUMBER
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**PENGANGKUTAN AIR SEBAGAI ALTERNATIF PENGANGKUTAN AWAM DI
MELAKA**

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ABSTRAK

Mod pengangkutan air merupakan salah satu daripada pilihan mod pengangkutan awam yang berperanan sebagai alternatif bagi mengurangkan masalah kesesakan lalu lintas yang semakin meruncing di Bandar Melaka. Pemilihan terhadap alternatif penggunaan pengangkutan air ini disebabkan pengangkutan berasaskan air mempunyai pelbagai kelebihan seperti penjimatan penggunaan tenaga, operasi yang selamat, aksesibiliti yang tinggi ke kawasan yang berkepadatan tinggi dan juga tidak mencemarkan udara. Oleh kerana kelebihan-kelebihan tersebut, peningkatan pengangkutan air sebagai pengangkutan awam di Bandar Melaka dicadangkan. Kajian penyelidikan penting dilakukan bagi mengkaji senario semasa penggunaan pengangkutan air di Sungai Melaka bagi menilai potensi-potensi pengangkutan air sebagai pengangkutan harian berdasarkan gunatanah di sekitar Sungai Melaka, sirkulasi bandar Melaka dan taburan penduduk dan pelancong domestik di Melaka River Cruise. Di samping itu, kajian dijalankan untuk menilai perkaitan antara faktor sosioekonomi dan penilaian operasi perkhidmatan seperti jadual perkhidmatan, tambang bayaran, kebersihan jeti, keselesaan dan keselamatan menggunakan pengangkutan air. Secara teorinya, perancangan pengangkutan membuat teori bahawa dengan mengaplikasi konsep pembangunan bercampur di dalam kawasan bandar akan menyebabkan permintaan terhadap perkhidmatan pengangkutan yang tinggi. Namun, anggapan secara teori ini haruslah dibuktikan secara statistik supaya perancangan pengangkutan air yang dicadangkan dapat diaplikasi dengan senario semasa serta mencapai objektif kajian yang disasarkan. Justeru, analisis menggunakan *Min*, *Crosstabulation* dan *Gamma* digunapakai bagi mengkaji perkaitan antara faktor-faktor yang terlibat supaya hipotesis dapat dibuktikan dengan sahih dan jitu. Hasil penemuan kajian mendapati aktiviti gunatanah, taburan penduduk dan pelancong serta laluan sirkulasi di Bandar Melaka memberi pengaruh yang kuat ke atas potensi pengangkutan air sebagai alternatif pengangkutan bandar Melaka. Akhir kajian dapat dirumuskan dengan ujian perkaitan yang dijalankan di antara sosioekonomi dengan faktor-faktor penilaian operasi perkhidmatan bagi menilai sambutan terhadap perkhidmatan pengangkutan air di Bandar Melaka. Kajian dapat dirumuskan dengan faktor-faktor penentu pemilihan mod pengangkutan, cadangan mengurangkan penggunaan kenderaan persendirian dengan menyediakan alternatif pengangkutan air serta meningkatkan mutu perkhidmatan pengangkutan bot Melaka River Cruise dalam usaha menggalakkan penggunaan mod pengangkutan awam bagi perjalanan harian di Bandar Melaka.

ABSTRACT

Water transportation has been one of the alternative modes for public transport in eradicating the problem of traffic congestion; which has become worse as time goes by, in the urban area of Melaka. It is a great alternative to utilize the water transportation as it poses numerous benefits, i.e. energy efficient, safer operation, provides good accessibility to high density areas and does not promote pollution emission. Due to the benefits mentioned, it is highly recommended to increase the usage of water transportation in Melaka City. The research analysis is vital towards understanding the current scenario of water transportation usage at Melaka River in order to be able to identify the potential of water transportation as the daily main mode choice. The analysis is done based on the surrounding land use of Melaka River, the circulation of Melaka City, the distribution of inhabitants and the domestic travellers at the Melaka River Cruise. Besides that, the research is also conducted to analyze the relationship between socioeconomic factors and the service operations provided, including the service schedule, travel fee, cleanliness of the jetty, comfortability and safety of using the water transport. As a theory, transportation planning has applied the concept of mixed-use development in urban areas, which in return has resulted in the increase of demand towards the services provided by transportation. However, the fundamental idea of this theory would have to be proven statistically just so the suggestions toward water transportation planning can be applied successfully with the current scenario, and achieve the targeted research objectives. Therefore, the data were analyzed using *Min*, *Crosstabulation* and *Gamma* in order to gauge the relationship between the included factors. Only by doing so, the research hypothesis can be analyzed with precision. The research findings were that the land use activity, distribution of inhabitants, the travellers and the Melaka City circulation have strong relationships in influencing the potential of water transportation as the alternative mode choice in Melaka City. Finally, the research ends with the analysis of the relationship between socioeconomic aspects and the factors of service operation in order to gauge the acceptance of people towards the services provided by the water transportation in Melaka City. As a conclusion, the influential factors towards transportation mode choice were identified; suggestions in reducing the usage of private vehicles by providing the alternative of water transportation were presented; and suggestions on improving the quality of boat services provided by the Melaka River Cruise were also introduced. The suggestions aimed to encourage the use of public transportation as the daily main mode of travel in Melaka City.