**Potential Research Topic:**

A study to understand public transport pass-holders' travel characteristics

**Research stream (suggestive):** Transit service design, travel demand management, behavioural science etc.

**Research Brief:**

All public transport operators in Karnataka issue various passes (concessions) for commuters using public transport. The passes range from daily/ monthly passes, student passes, senior citizen passes, passes for people with disabilities, route specific passes (like NICE road passes), employee passes, passes for ex-service men, etc.

Pass holders contribute a large extent to the ridership of the public transport system – possibly in the range of 30-40%. But the travel behavior of the various pass holders is mostly unknown as they are not captured in the existing system (like ETMs). However, all public transport agencies produce estimates of the trips made by pass-holders to claim subsidies from the Government.

Also, there is a great potential to optimize/simplify the kind of passes that a public transit agency should issue, pricing of passes or the kind of passes that the public transport agencies should promote to get greater ridership and lowers operational costs. However, such planning is only possible if adequate information is available on the travel characteristics/ behavior and socio-economic profile of the pass holders.

The research should undertake efforts to identify various passes that are in vogue in public transport systems, gather information on the number of passes that are issued annually over a period of last 5-10 years, and carryout surveys of the different pass holders with adequate samples to identify travel trends.

The surveys should capture as to how frequently they use the passes on public transport, number of trips made in a day, commonly used origin-destinations, time-of-day travel, purpose of travel, first and last mile mode used to access public transport, first and last mile distance traveled to access public transport, in addition to capturing the user information like age, occupation, income range etc.

The data should be then analyzed to understand trends in trip making by holders' different kinds of passes, estimate of the total trips made the pass holders, total distance traveled by public transport, routes with high usage of passes (for different kind of passes), type of services where passes are utilized most etc. The study should also provide insights to decision makers on how to intervene in the pass system to make it more efficient for operations and convenient for users.

The evidence based out of the research may assist the transit operators in planning for passes.