Investigation and Optimization of Bus Network in Mountain Cluster Cities: A Case Study of Routes 530 and 551 by Chongqing Northern Public Transport Co.

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Amidst China's rapid economic expansion and escalating urbanization, the proliferation of city roads has led to increasingly severe traffic issues. The unique topography of mountain cluster cities imposes specific demands on the optimization of urban bus networks. This paper focuses on bus routes 530 and 551 as case studies. Employing field surveys and other research methodologies, I've tailored my approach to the distinctive development patterns of China's clustered mountain cities. Between January 2, 2023, and March 11, 2024, I optimized the existing bus network's routes and schedules. This initiative not only meets the travel needs of city residents but also enhances the efficient use of urban traffic resources, thereby supporting the economic development of Chinese cities.