

**Consideration of Economic Development Potential:
Light Rail Transit in Durham and Orange Counties, North Carolina**

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EXECUTIVE SUMMARY

Executive summary for “Consideration of Economic Development Potential: Light Rail Transit in Durham and Orange Counties, North Carolina”

Construction of the proposed 17.1 mile Durham-Orange Light Rail Transit Project (D-O LRT) will spark the economies of the 16-county Research Triangle Region and benefit the entire state. The D-O LRT will connect major regional activity centers such as UNC Hospital, Duke University, Duke and Durham VA Medical Centers, and downtown Durham.

This 17-station transit line will spur the type of new development sought after by a young, highly educated and economically competitive workforce and attract the businesses looking for these types of workers that will help the region compete for decades to come.

Light Rail will attract jobs and spur long-term economic development

The economic impact of the project will be substantial. When completed, the new development in the rail station areas will:

- Support almost **20,000 new jobs** within the rail station areas in Durham and Orange Counties
- Result in **10,000 additional jobs outside the rail station areas** within the two counties
- **Add \$4.7 billion of economic output each year in Durham County and Orange County alone**, with **more than \$600 million** of additional economic output **statewide**
- **Add several thousand additional jobs** in the other 14 counties that comprise the Research Triangle, plus **1,300 more jobs** in the State’s other 84 counties
- Provide **more than \$175 million in tax revenue per year** to the towns, cities, counties, and State to help financially support essential public services.

Building Light Rail will create jobs

The economic benefits have already begun. As construction of the LRT system officially begins and private development continues in the rail station areas, jobs will be created:

- D-O LRT construction will require on average more **than 840 workers each year** in Durham County and Orange County until construction is complete.
- Construction of nearby office and retail buildings will take about 23 years, and will result in more than **530 jobs for workers each year** on average in Durham County and Orange County.
- Construction of residential buildings in rail station areas will take about 10 years, resulting in about **740 jobs each year** in Durham County and Orange County.

Moreover, the resulting compact, transit-oriented neighborhoods will also bring significant cost savings for local government. New urban development requires expanding basic urban services such as road construction and maintenance, fire and police protection, and garbage pickup. Car-dependent, highway-centric development requires municipalities to maintain new roads and expand emergency and other services to new geographic areas, increasing the cost of basic services. More geographically compact development focused around rail stations reduces these costs (Litman 2015). Steering growth into these

rail station areas will allow Durham and Chapel Hill to spend less money on municipal services than if growth were to continue solely in an automobile-oriented fashion.

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Smart investments in transportation infrastructure also can have outsized impacts on economic development by leveraging large amounts of private investment. Not all types of transportation investments have the same economic impact. In regions with extensive roadway networks, the most productive transportation investments are those that create new types of transportation systems. These enable novel economic development opportunities that cannot be accommodated elsewhere in the region.

Much like the regional partnership that brought the wildly successful and transformative Research Triangle Park (RTP) into existence 57 years ago, the D-O LRT Project can catalyze the region's economic growth by enabling economic development that meets the growing national demand for compact, pedestrian-friendly, and amenity-filled neighborhoods and help the region continue to attract a highly skilled workforce. With the implementation of D-O LRT, the region will be well equipped to meet the needs of those businesses and people searching for the lifestyle and economic benefits of living in higher-density neighborhoods. It will not shut the door on other types of development, however. There will continue to be ample supply throughout the region of high-quality, low-density suburban land development of the type that has occurred in the Research Triangle from the 1950's through the early 2000s.

To quantify the economic benefits of the D-O LRT Project, we have prepared an economic impact analysis that analyzes the fiscal impact of the construction of the Project and the retail, commercial, and other development that would take place around the D-O LRT stations. As the table below indicates, the development in rail station areas made possible by D-O LRT would account for more than 30,000 new jobs in Durham County and Orange County and more than \$175 million in annual tax revenue statewide.

The economic analysis uses industry-standard modeling techniques to determine the fiscal impact of five phases of the D-O LRT Project. The five phases include:

1. Construction of the D-O LRT Project (through 2026)
2. Construction of buildings in rail station areas containing offices and retail, from approximately 2020 through 2043
3. Construction of residential buildings in rail station areas, from approximately 2022 to 2031
4. Operation of the D-O LRT system (beginning in 2026)
5. Ongoing operations of businesses within the rail station areas (beginning in approximately 2023 and fully built out by 2043)

An overview of the impacts of the construction of the project, its operation, and the financial impact of the private development at full build-out is included below:

D-O LRT Economic Output Impact

Cumulative Impact

		D-O LRT construction	Commercial construction	Residential construction
		From 2015 to 2026	Approximately 2020 to 2043	Approximately 2022 to 2031
Total Increase in Economic Output over baseline	Durham-Orange Triangle Region	\$1.43 billion	\$1.72 billion	\$1.07 billion
	Statewide	\$1.63 billion	\$1.98 billion	\$1.23 billion
	Statewide	\$1.78 billion	\$2.21 billion	\$1.35 billion

Annual Impact (each year)

		D-O LRT operating	Commercial when fully built-out
		From 2026 continuing	From 2043 continuing
Annual Increase in Economic Output over baseline	Durham-Orange Triangle Region	\$21.7 million	\$4.73 billion
	Statewide	\$22.3 million	\$5.19 billion
	Statewide	\$22.3 million	\$5.36 billion

The job impacts of the different phases of the economic impact of the D-O LRT project are divided into three categories:

1. **Direct jobs:** Jobs directly involved with the project. For the D-O LRT construction period, these are jobs working on building the project itself. This also includes jobs in those commercial establishments that are located in the developments in rail station areas built because of the D-O LRT Project.
2. **Indirect jobs:** Jobs in other industries that are created because of demand from the jobs in the direct industry. For example, a printing business located in a new building near a light-rail station might need to purchase ink from a local supplier, paper from another supplier, and legal services from a local law firm. The jobs created to support this additional demand are indirect jobs.
3. **Induced jobs:** These are jobs that accrue from spending of the increased income resulting from the direct and indirect jobs in the area. As an example, people working within the new commercial buildings will purchase food, clothing, and personal items from local businesses throughout the region and the State. Jobs created to meet this employee demand are induced jobs.

Revenue impacts are determined statewide. The tax implications have been adjusted on the assumption that construction materials purchased for the DO-LRT project will be exempt from State and local option sales taxes. In addition, some of the construction spending such as for light-rail vehicles is not included

in the revenue projections, since that money is assumed to be spent outside the region where these items are manufactured.

D-O LRT Jobs and Revenue Impact

		D-O LRT construction	Commercial construction	Residential construction	D-O LRT operating	Commercial ongoing ²
		From 2015 to 2026	Approximately 2020 to 2043	Approximately 2022 to 2031	From 2026 continuing	From 2043 continuing
Annual Jobs Durham County & Orange County	Direct	579	424	379	235	19,930
	Indirect	159	56	283	9	6,295
	Induced	108	58	81	26	4,260
	TOTAL JOBS	846	538	743	270	30,485
Annual Revenue State of North Carolina	Sales Tax	\$1,258,333	\$1,152,174	\$1,570,000	n/a	\$74,800,000
	Property Tax	\$1,100,000	\$747,826	\$1,020,000	n/a	\$48,600,000
	Income Tax	\$825,000	\$460,870	\$670,000	n/a	\$29,800,000
	TOTAL REVENUE¹	\$3,708,333	\$2,660,870	\$3,590,000	n/a	\$175,600,000

¹Total revenue includes other tax revenue, including corporate profits tax and other taxes, associated with station area development.

²Jobs and tax revenue would be produced at lower levels prior to this date, which reflects projected date of rail-station area build-out.

Details of the assumptions used in the economic impact analysis are available in the full report.

Overall, the proposed investment in light-rail can be expected to unlock the full potential of the rail station areas in Chapel Hill and Durham, providing a substantial economic boost and helping to keep the region competitive for the high-wage, high-skilled jobs in the coming decades. Construction of the light-rail system alone will bring this region more than a thousand jobs for a decade, and when completed, the light-rail system will help support tens of thousands of jobs and many millions of dollars of new tax revenue.