## **Executive Summary**

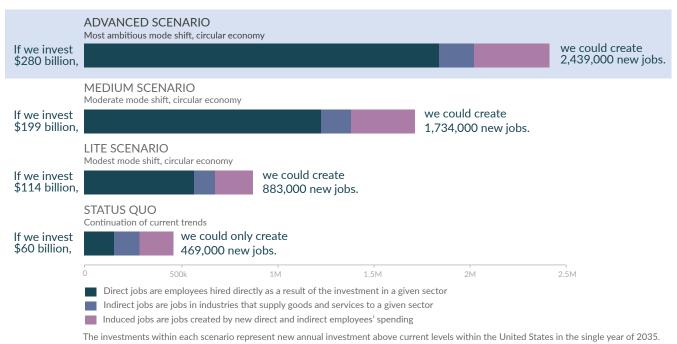
The urgency of eliminating emissions from the transportation sector—the number one source of U.S. carbon emissions—intensifies with every day of inaction. Some climate advocates believe that decarbonization hinges entirely on quickly electrifying all remaining gas-powered vehicles in a burgeoning electric vehicle market.

In contrast, this report reveals the broad benefits of a diversified, pro-worker, and pro-community transportation system. Such an approach will not only reduce emissions faster, provide more mobility for more people, and lessen the burden of mineral extraction for batteries—but also stimulate millions of new, dignified jobs across the supply chain. Policymakers face a unique opportunity to decarbonize the transportation system in a way that is both rapid and equitable.

We present three scenarios that assume progressively increased investment into sectors that diversify transportation options, improve working conditions, and reduce energy transition mineral demand. These scenarios build on the findings of our 2023 report, "Achieving Zero Emissions with More Mobility and Less Mining."

Each scenario that we explore—advanced, medium, lite, and status quo—corresponds to a distinct supply chain investment strategy in the year 2035, and outlines potential job impacts in four main categories: 1) vehicle manufacturing; 2) infrastructure; 3) transit operations; and 4) circular supply chains. We find that an expansion of mobility options—including mass transit and safe streets—will produce a net increase of 2.4 million jobs.

# Investment in the just transportation supply chain could create up to **2.4 million** net new jobs by 2035



- Under an "advanced" investment scenario, in which we invest \$280 billion annually in diversified transportation and a circular economy, we find a net total of more than 1.8 million new direct jobs and 2.4 million new total jobs by 2035.
- Under the "medium" investment scenario, with an investment of \$199 billion annually, we find a net total of 1.2 million new direct jobs and 1.7 million new total jobs.
- Under the "lite" investment scenario, with an investment of \$114 billion annually, we find a net total of 570,000 new direct jobs and 880,000 new total jobs.
- The status quo scenario, in which we don't shift our investment priorities, results in fewer than 150,000 new direct jobs—less than 10 percent of the jobs created in the advanced investment scenario. The status quo scenario would result in 469,000 new total jobs.

Shifting to a decarbonized transportation system will require building entirely new supply chains, mitigating job losses that occur in industries currently dependent on fossil fuels, and correcting practices that have discriminated against marginalized people or left them behind.

In terms of the transportation sector, this means thinking beyond simply swapping every single gas-powered vehicle for an electric one. From a climate standpoint, this the slowest pathway to reducing sectoral emissions, compared to an approach that expands transit and other mobility options. Under this status quo scenario, both workers and communities lose. Compared to the advanced scenario, there would be 90 percent fewer direct jobs, and the approximately 30 percent of people who do not drive will be left with the same inadequate options for accessing important needs in their lives. Meanwhile, rural and Indigenous communities will bear the burden of a huge increase in mineral extraction, and the consequences will affect water, air, and soil for hundreds, if not thousands, of years.

Transportation and climate planners need to diversify their strategy towards diversified transportation—including public transit, bicycling and pedestrian infrastructure, and battery recycling. This approach is not only better for the environment, it is better for workers and the green economy. By moving

away from private passenger vehicles and investing in diversified transportation, the US could:

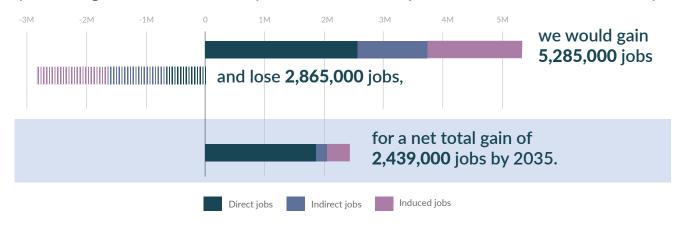
- more quickly and efficiently eliminate emissions;
- create millions of dignified jobs across the supply chain;
- reduce the demand for energy transition mineral extraction, which threatens water and biological resources and endangers frontline mining communities;
- address a host of deep structural problems within the current US transportation system: health and safety impacts from car accidents; economic losses from expensive fuel and insurance prices; and wasted space in towns and cities due to prioritization of land for parking and roads;
- account for those who either do not drive or do not own a vehicle, increasing their access to good jobs, housing, healthcare, education, recreation, and other basic needs.

Contrary to the narrative perpetuated by car manufacturing corporations and their allies, our analysis shows that auto executives are not net "job creators." Our findings are clear: shifting away from a transportation system anchored by private vehicles would generate more jobs overall, expand mobility options, and protect communities and ecosystems.

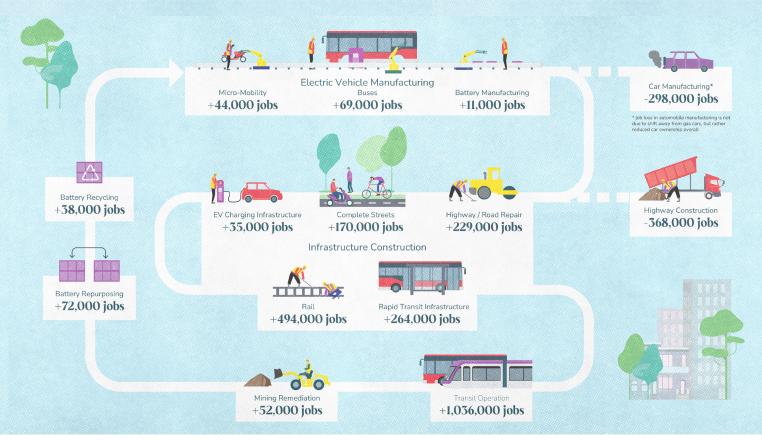
A whole supply chain approach that accelerates decarbonization; minimizes supply chain vulnerabilities; reduces environmental and cultural harm; upholds

human, Indigenous, and labor rights; and improves mobility for millions of US residents will also generate up to 5.3 million new jobs that far outnumber job losses.

#### By investing \$280 billion annually in diversified transportation and a circular economy,



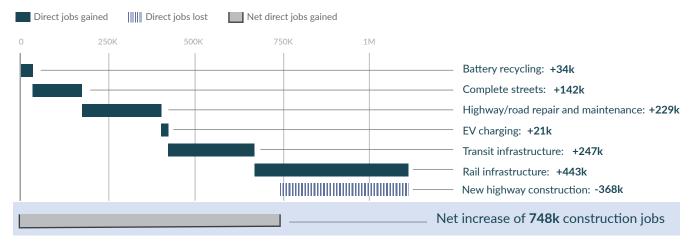
#### Of the net jobs gained, 1.8 million would be direct and spread across the transportation sector



Under the advanced scenario, public transit operations employment would increase by more than 200 percent compared to current employment. These unionized jobs would be spread across every state in the country.

Highway construction jobs would be more than replaced by construction jobs spurred by investment in transit and rail infrastructure, highway and road repair, and roads designed to provide safe access for everyone, from pedestrians to motorists.

### The advanced scenario results in a net gain of more than **740,000** total construction jobs



Under the advanced scenario, we can expect over 257,000 new direct manufacturing jobs, as production of electric buses, rail, bikes, scooters, and batteries ramps up.

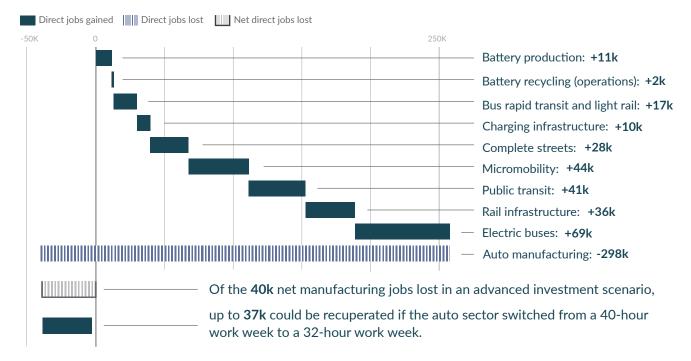
In addition to the level of investment, our report shows that the business model and ownership structure are key factors in determining the number and distribution of employment.

Under the current business model and ownership structure, the auto industry is likely to see a loss of employment in the scenarios considered, where private car sales are reduced. However, with a different business model—or even new ownership structures altogether—and greater worker control, auto companies could direct more revenue toward reducing work hours, increasing workers' pay, and retaining and hiring more workers during the transition. For example, in the advanced scenario, the manufacturing gains from other types of vehicle manufacturing amount to 87 percent of the lost auto manufacturing jobs. A

shift from a standard 40-hour work week to a 32-hour work week with no loss in pay could further mitigate job loss within the auto sector. When these additional auto jobs are combined with new manufacturing jobs in other sectors, the modeling shows an almost neutral impact on overall manufacturing jobs in the advanced scenario.

Greater worker control also represents an opportunity to operate in solidarity with people on the frontlines of the transportation supply chain, and could be one step towards facilitating a democratic planning process for the industrial transition in which workers and communities could collectively decide what these factories will produce. Such a process could even lead to a shift away from manufacturing private transportation and toward building more public transit and micromobility vehicles—a change that might give workers better job security while also improving outcomes across the supply chain.

## The loss of auto manufacturing jobs in an advanced scenario could be mitigated by the auto sector switching to a 32-hour work week



Transforming our polluting and inefficient transportation sector into a diversified, proworker, and pro-community system would not only rapidly advance decarbonization. Crucially, it would also create massive new employment opportunities for people who may need to transition out of their jobs in auto manufacturing or highway construction while investing in infrastructure, and offer remediation for mining communities and mobility justice for people who have been left behind by the automobile era. With such an investment strategy, we can add more than 2 million net new jobs to the economy and provide off-ramps for highway construction workers and autoworkers whose jobs may be displaced during decarbonization.

The US faces a critical juncture. It can choose the status quo—a transportation network dominated by sprawling roads and large, private vehicles that perpetuate enormous mineral consumption and an underclass of people who do not drive or own a car. Or it can make intentional policy investments into a transportation system that slashes carbon, democratizes mobility, protects workers, reduces harmful extractive mining worldwide, and yields maximum economic benefits and job creation for everyone.

Taken together, these investments represent a once-in-a-generation opportunity for a zero-emissions transportation system which simultaneously improves the fate of the environment and communities while creating millions of good jobs to help workers transition into the green economy.