Acknowledgements

The authors would like to acknowledge the Department of City and Regional Planning (DCRP) at the College of Environmental Design (CED) at the University of California, Berkeley, Rakhi Basu, Mayor Acquanetta Warren of Fontana, the staff and elected officials from the City of Fontana, our colleagues at the National Institute of Advanced Studies at the Indian Institute of Science, Scott Moura, and countless other faculty and mentors who have gone above and beyond in providing guidance and input into our report.

We would like to thank our course colleagues Kenji Anzai, Karen Chavez, Julia Flessel, Hunter Oatman-Stanford, Edgardo Vazquez, and Shiying Wang, as well as Karina Camacho and Emily Rae. We would also like to thank Eugene Lau for layout assistance.

Finally, we want to extend a special thanks to our professor, Karen Trapenberg Frick, who provided us with invaluable support and feedback throughout this process. We could not have completed this report without you.

Our Team

We are a team of eight graduate students studying transportation policy, planning, and engineering in the Department of City & Regional Planning at the University of California, Berkeley.

Chun Ho Chow, MCP¹ & MS², 2022 Ethan Ebinger, MCP & MS, 2021 Jonathan Kupfer, MCP & MS, 2021 Sydney Maves, MCP 2022 Olivia Ortiz, MCP 2022 Maya Price, MCP & MS, 2021 Molly Sun, MCP 2022 Tyler Truksa, MS, 2021

We would like to acknowledge that none of the authors are from the City of Fontana or the Inland Empire, and it is through our connection to UC Berkeley that we were granted access to Fontana's city officials and staff members. None of the researchers currently or have previously lived in the City of Fontana, but through our research have come to care for the City, the people who live and work there, and the local environment.

Due to project constraints, we were also unable to collaborate with community-led organizations in Fontana or the region. We want to acknowledge that many ideas considered within our report are not new; local residents, advocates, and organizations have been calling for such changes across the region for many years with varying degrees of success. It is our hope that this report will provide valuable insights to local residents and city staff alike, and provide a foundation for future collaboration.

Instructor: Professor Karen Trapenberg Frick

Course: CYPLAN 218, Transportation Planning Studio, Fall 2021

Department of City and Regional Planning, University of California Berkeley

¹ Master of City Planning

² Master of Science

Executive Summary

This semester, our team of eight graduate students studying transportation policy, engineering, and planning at UC Berkeley's Department of City & Regional Planning conducted a semester-long research project studying the externalities, both positive and negative, of the warehousing and transportation industry in Fontana, California. Our team completed an array of qualitative and quantitative analyses, including a site visit to Fontana, a deep literature and policy review, a local and regional economic analysis, and explorations into air pollution, truck electrification, and road safety. This report is a culmination of our work.

This is a critical moment to examine the warehousing and logistics industry in the Inland Empire. COVID-19 has accelerated consumer shifts towards e-commerce, leading to an ever greater reliance on the people and places that are foundational to goods movement. In recent months, we have also seen firsthand what happens when the supply chain is disrupted and the global ramifications this has for prices and the availability of basic consumer goods. Warehousing is the primary economic regional cluster based on the data; it's undeniable that they provide jobs but analyses indicate that most of these jobs, irrespective of employer, do not offer adequate pay, stability, or benefits to sustain individuals and their families. Projections suggest it's these low paying jobs that will continue to grow in the region. Despite these challenges, electric vehicle technology is rapidly advancing, creating opportunities to reduce some environmental impacts of goods movement.

The City of Fontana is increasingly at odds with community groups who are rightly concerned about future warehouse development and the impact of development on their health and the quality of life in Fontana. This has resulted in expensive and lengthy litigation and lost opportunities for the city to work with community groups in a proactive, collaborative, and committed way.

There is also an appetite for new regulation in Fontana and the City has proposed a new local ordinance - the Industrial Commerce Center Sustainability Standards Ordinance - to regulate the warehousing industry. Given that the ordinance has not yet been passed by council, the City is still in the window of opportunity to amend the proposed ordinance to

increase transparency in the development process and strengthen environmental and community protections.

We have organized our research into this executive summary and seven chapters listed below:

- 1. Introduction
- 2. Policy Overview & Analysis
- 3. State of the Economy
- 4. Labor & Coalition Building
- 5. Air Quality and Pollution Monitoring and Action
- 6. Modeling Sustainable Trucking Practices
- 7. Road Safety

As a major logistics center in the global supply chain, our team believes Fontana can lead the region and industry forward in a sustainable, equitable, and resilient way by advocating for higher sustainability standards, labor rights protections, and innovative technologies and regulations to reduce emissions from the transportation of goods.

From all of our work, it feels very clear to us that local residents care very deeply about the warehouses, the logistics industry, and everything they entail. It is unique, frankly, to have so many residents engaged and almost demanding participation in civic life. To respect and harness that energy, we believe that the city can create committed, ongoing proactive processes for these people to engage with, to share their ideas, and to work with elected officials and other stakeholders to negotiate solutions. Hence, in addition to the research we conducted to begin to understand the long history and complexities of the region, as well as the technical analyses detailed in each section, we lay out direct actions various stakeholders can take to leverage the community's assets.

Below is a table of our full list of recommendations, organized by section. For each recommendation we have assigned a priority value, ranging from the lowest (+) to the highest (+++). Although we believe that all the recommendations should be moved forward, some are more pressing or easier to implement and therefore warrant a higher priority. We have also identified the entities responsible for implementation of each recommendation. Most are directed at the City of Fontana, but many will require regional collaboration.

	Recommendation	Priority	Implementing Entities
6.4	Focus on regional problems and solutions through a "Future Fleet Fontana" incubator	++	City of Fontana; Chamber of Commerce
6.5	Apply to federal and state funding sources for electrification	++	City of Fontana; Local Businesses
6.6	Invest in and promote alternative solutions, including congestion pricing and electrified short-haul rail	+	City of Fontana
Chapter 7: Road Safety			
7.01	The city should work with CalTrans to improve the safety of roads that are in CalTrans Right of Way	+++	City of Fontana, CalTrans
7.02	The City should instate a Traffic Safety Commission to monitor traffic safety and determine where traffic safety investment should be directed	+++	City of Fontana
7.03	Consider the collision history of the road network when designing the truck priority network	+++	City of Fontana
7.04	The City should actively maintain an open data portal database with documents and files to support their planning initiatives.	+++	City of Fontana
7.05	The City should collect ongoing community input in order to identify locations in the city where Fontana residents feel unsafe and where traffic safety investment should be directed	+++	City of Fontana
7.06	Improve the existing street network to calm traffic in particularly dangerous locations	+++	City of Fontana
7.07	Partner with religious and faith-based institutions to help fight homelessness	++	City of Fontana; Religious Institutions
7.08	Leverage the city's Safe Routes to School partnership to create safer streets and encourage more students to walk and bike to and from school	++	City of Fontana; Fontana Unified School District
7.09	Create a Local Roadway Safety Plan using state funding	++	City of Fontana; CalTrans
7.10	Stay up to date on the latest "best practices" of road safety (e.g., National Association of City Transportation Officials guides)	+	City of Fontana
7.11	Commit to Vision Zero goals and pledge to eliminate all serious and fatal injuries on the road via a systems approach	++	City of Fontana