

## Transportation Needs Assessment for Kettleman City



Figure 1: Kettleman City Public Outreach Event

### Clean Mobility Options Voucher Pilot Program (CMO)

Submitted on January 31, 2022

Prepared by: The LEAP Institute

“CMO is part of California Climate Investments ([CCI](#)), a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.”



# Transportation Needs Assessment for Kettleman City

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# Transportation Needs Assessment for Kettleman City

## Acknowledgements

The LEAP Institute and the Shared-Use Mobility Center would like to thank the following organizations for their contribution to the Community Transportation Needs Assessment (TNA) process in all project areas:

Kettleman City Advisory Committee Members:

- Pat Sanchez, Superintendent, Reef Sunset Unified District (RSUD)
- Kristi A. Castillo, Principal, Kettleman City Elementary School (KCES)
- Maricela Alatorre, Green Action for Economic and Environmental Justice (GreenAction)
- Miguel Alatorre, El Pueblo por un Aire y Agua Limpia (El Pueblo)

Kettleman City Site Level Team:

- Miguel Alatorre, El Pueblo por un Aire y Agua Limpia, Kettleman City
- Alexis Vargas, Community Leader, Kettleman City

We would like to thank Kettleman City community members who took the time to provide input, conducted outreach, and completed the transportation needs assessment.

Thank you to the California Air Resources Board (CARB) for providing essential funding toward clean transportation investments in vulnerable communities through the California Climate Investments (CCI) program, and CALSTART for their invaluable assistance.

# Transportation Needs Assessment for Kettleman City

## Executive Summary

The LEAP Institute is a 501 (c) 3 nonprofit corporation and a Latino based environmental justice community institution based in Fresno and Huron, California. Its mission is to engage Priority (Disadvantaged) Communities to increase social justice awareness, strengthen grassroots leadership, while empowering residents, farmworkers, immigrants and youth to achieve sustainable and healthy communities. The LEAP Institute, formerly known as Valley LEAP, was initiated in 2008, incorporated in 2017, and obtained non-profit status in 2018. The LEAP Institute is the pioneer of the Green Raiteros rural ridesharing program in the San Joaquin Valley.

The LEAP Institute received \$50,000 from California Air Resources Board (CARB), a California government-centered agency for clean air, to design and implement a plan to improve transportation options in the Priority Community of Kettleman City. The project provides potential access to new, clean mobility options including an electric vehicle car sharing program and a mix of additional mobility options based on residents' needs, such as transit passes, bike sharing, and e-scooter sharing. The project potentially increases access to economic opportunity, medical facilities, schools, parks, grocery stores, and other daily needs, while also working to reduce vehicle trips and greenhouse gases to meet the state's broader climate goals. This Transportation Needs Assessment (TNA) is in support of a Community Mobility Option (CMO) project funded by California Climate Investments (CCI), a statewide initiative that puts billions of Cap-And-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment—particularly in disadvantaged communities.

### Project Site:

- **Kettleman City Elementary School** - Kettleman City is an impoverished community with a lack of infrastructure and suffers from a disproportionate impact of air pollution, including mobile sources that travel through the heart of the community on State Route 41. Kettleman City Elementary School is in the Reef Sunset Unified School District (RSUD) and is located at 701 General Petroleum in Kettleman City.

### Project Goals and Objectives:

- Increasing access for low-income residents and disadvantaged communities to economic opportunity, medical facilities, schools, parks, grocery stores, and other daily essential needs.
- Providing tailored clean mobility options to address resident needs identified through a community transportation needs assessment and meet equity goals.
- Reducing greenhouse gases and criteria pollutants from the combination of reduced vehicle trips and use of electric vehicles rather than internal combustion engine vehicles.
- Reducing private vehicle ownership and vehicle miles traveled (VMT).
- Reducing transportation costs for residents.
- Establish a model of best practices for other San Joaquin Valley cities and disadvantaged communities.

## **Transportation Needs Assessment for Kettleman City**

- Create a sustainable and viable mobility program for rural communities that is modeled after the most innovative transportation community mobility programs currently in operation.

### **Project Team**

The project team led by LEAP Executive Director, Rey Leon and supported by LEAP staff. LEAP, in collaboration with the Kettleman City Advisory Committee and Site Level Team, led the development of the needs assessment survey, conducted the analysis of the survey results, and assisted with the vendor selection process for car sharing and additional mobility services. LEAP also provided project administration and budgetary oversight and led coordination efforts on project design and implementation.

### **Community Transportation Needs Assessment**

Prior to implementing car sharing and mobility hubs services, the project team led a community transportation needs assessment (TNA) to understand residents' current travel behavior and identify their transportation needs and challenges. The needs assessment also explored residents' interest in each potential mobility option (e.g. bike sharing, ride-sharing) to determine which to prioritize.

The needs assessment was designed to:

- Understand residents' current transportation habits and needs.
- Understand challenges faced by residents in accessing and utilizing various mobility options for themselves and their family.
- Gauge residents' current knowledge and interest in learning about and using new shared mobility options located at an on-site mobility hub.
- Understand the demographic profile of the residents.
- Collect baseline data to measure progress on project goals, e.g. access to destinations, mode shift, and car ownership.

Conducting a needs assessment is a valuable first step, and empowers residents to shape the clean transportation investments happening in their communities. This is a key lesson for pilot project design, and an approach that can be modeled in other San Joaquin Valley communities that want to increase access to clean transportation and mobility options.

### **Key Finding and Lessons Learned**

- Communities engaged are, for the most part, geographically and linguistically isolated. Public transit, even when available, has gaps and becomes insufficient for many, especially ADA and seniors.
- Priority Community residents are left out, especially if they are not English speakers residing in more well-to-do areas where more amenities are developed. It becomes worse for those that only speak Spanish and it only becomes more challenging for communities that speak Spanish as a second language.
- Survey fatigue is real, and many community members experienced this. In the community of Kettleman City especially which suffers from various environmental injustices, this population is continuously turned to for information on these issues.

## **Transportation Needs Assessment for Kettleman City**

- One of the challenges faced was that community members were unfamiliar with some of the alternative transportation methods so they would quickly lose interest. During training staff came up with multiple talking points that engaged residents on issues that mattered to them. Although they were unfamiliar with electric vehicles, they were very familiar with the bad air quality around them.
- Green Raiteros (GR), the pioneering EV rural ridesharing program grown from the old practice used by farmworkers in Huron, California, has proved very successful. Apart from bridging the gap in access to essential appointments such as medical, social service and covid testing and vaccination, it has been evolving and upgrading to also empower the workforce from isolated communities to training sites to build skills and advance upward socio-economic mobility.
- EV Charging Infrastructure - Kettleman City has no EV charging infrastructure whatsoever. The Kings Area Rural Transit has plans to install a Solar based Level 2 charger within the next year. Our assessments of those chargers are that they are not realistically of Level 2 quality and fall short of being a good alternative. The chargers that exist in proximity of the community of Kettleman City are located at the Commercial corridor on the interstate 5, approximately 1.5 miles away. Apart from the Tesla Super charger station of a few dozen superchargers and there is also a DC Fast Charger for Chadmo/Combo at the Chevron gas station and a Level 2 charger at the Best Western Inn.

## **Introduction**

### **Project Background**

The LEAP Institute is a 501 (c) 3 nonprofit corporation and a Latino based environmental justice community institution based in Fresno and Huron, California. Its mission is to engage San Joaquin Valley communities to increase social justice awareness, strengthen grassroots leadership, while empowering residents, farmworkers, immigrants and youth to achieve sustainable and healthy communities. The LEAP Institute, formerly known as Valley LEAP, was initiated in 2008, incorporated in 2017, and obtained non-profit status in 2018. The LEAP Institute is the pioneer of the Green Raiteros rural ridesharing program in the San Joaquin Valley.

The LEAP Institute received \$50,000 from California Air Resources Board (CARB), a California government-centered agency for clean air, to design and implement a plan to improve transportation options in the three disadvantaged communities of Kettleman City. The project provides access to new, clean mobility options including an electric vehicle car sharing program and a mix of additional mobility options based on residents' needs, such as transit passes, bike sharing, and e-scooter sharing. The project increases access to economic opportunity, medical facilities, schools, parks, grocery stores, and other daily needs, while also working to reduce vehicle trips and greenhouse gases to meet the state's broader climate goals. This Transportation Needs Assessment (TNA) is in support of a Community Mobility Option (CMO) project funded by California Climate Investments (CCI), a statewide initiative that puts billions of Cap-And-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment—particularly in disadvantaged communities.

## **Transportation Needs Assessment for Kettleman City**

Project goals and objectives include:

- Increasing access for low-income residents and disadvantaged communities to economic opportunity, medical facilities, schools, parks, grocery stores, and other daily needs.
- Providing tailored clean mobility options to address resident needs identified through a community transportation needs assessment and meet equity goals.
- Reducing greenhouse gases and criteria pollutants from the combination of reduced vehicle trips and use of electric vehicles rather than internal combustion engine vehicles.
- Reducing private vehicle ownership and vehicle miles traveled (VMT).
- Reducing transportation costs for residents.
- Establish a model of best practices for other San Joaquin Valley cities and disadvantaged communities.
- Create a sustainable and viable mobility program for rural communities that is modeled after the most innovative transportation community mobility programs currently in operation.

### **Project Team**

The project team will be led by LEAP Executive Director, Rey Leon and will be supported by LEAP staff. LEAP, in collaboration with the Kettleman City Advisory Committee, led the development of the needs assessment survey, conducted the analysis of the survey results, and will assist with the vendor selection process for car sharing and additional mobility services. LEAP will also provide project administration and budgetary oversight and will lead coordination efforts on project design and implementation.

### **On-Site Partners, Project Advisory Committee, and Site Level Teams**

On site partner will be Kettleman City Elementary School.

In addition to our on-site partner, LEAP will convene a Project Advisory Committee (PAC) made up of the following collaborators.

- Pat Sanchez, Superintendent, Reef Sunset Unified District (RSUD)
- Kristi A. Castillo, Principal, Kettleman City Elementary School (KCES)
- Maricela Alatorre, Green Action for Economic and Environmental Justice (GreenAction)
- Miguel Alatorre, El Pueblo por un Aire y Agua Limpia (El Pueblo)

The Site Level Team (SLT) will consist of the following community residents. The SLT members serve as an important role in sharing their knowledge, advice, and vision to help design a project that will work best for all residents. SLT members conduct outreach and serve as ambassadors of the project to their neighborhoods. SLT members are compensated for their time and expertise.

- Miguel Alatorre, El Pueblo por un Aire y Agua Limpia, Kettleman City, CA
- Alexis Vargas, Community Leader, Kettleman City, CA

### **About the Site**

## Transportation Needs Assessment for Kettleman City

Kettleman City is in Kings County. Kings County Regional Transportation Plan (RTP) 2018<sup>1</sup> was commissioned by the Kings County Association of Governments. This plan fulfills the requirement of the agency to develop a comprehensive long-range planning document every four years. It addresses Kettleman City as an environmental justice community that is located more than ½ mile distance from a frequently used transit facility. The 2018 Regional Transportation Plan was not anticipating improving frequent transit access to EJ communities.

In April 2020<sup>2</sup>, the Kings Electric Vehicle Readiness Plan was commissioned by the Kings County Association of Government. The plan was developed in response to the evolution of plug-in electric vehicles (PEVs) stations in the county and to provide best practices and availability of funding sources. This plan explores the need and feasibility requirements for communities to adopt PEVs. One of the common requirements for purchasing an electric vehicle is to own the home where the charger will be installed as many renters do not have permission to install on their rental property. In Kettleman City 61% of the households are renters. The study found one Tesla charger in Kettleman City, that is mostly used by out-of-town travelers. There are no chargers identified in the nearby Avenal or Corcoran cities.

The 2019 Kings Active Transportation Plan<sup>3</sup>, was commissioned by the Kings County Association of Governments. This plan had three main objectives:

- Identify high-priority projects that will make walking and biking safer and more convenient.
- Support the goals under the Kings County Regional Transportation Plan (RTP) and Sustainable Communities Strategies (SCS) for a more balanced transportation system, while serving as the foundation for the non-motorized transportation chapter of the 2018 update of the RTP/SCS;
- Position the high-priority projects, and equip the jurisdictions in Kings County, to better compete for federal, state and regional grant funds. This plan identified that there were no bike lanes or paths between residential community and the highway commercial area. The above mentioned RTP plan identified that it would not be improving frequent access for EJ community such as Kettleman City. That said, there were no proposed improvements for Kettleman City.

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<sup>1</sup> [https://www.kingscog.org/rtp\\_adopted](https://www.kingscog.org/rtp_adopted)

<sup>2</sup> [https://www.kingscog.org/vertical/Sites/%7BC427AE30-9936-4733-B9D4-140709AD3BBF%7D/uploads/KCAG\\_EVRP\\_FINAL.pdf](https://www.kingscog.org/vertical/Sites/%7BC427AE30-9936-4733-B9D4-140709AD3BBF%7D/uploads/KCAG_EVRP_FINAL.pdf)

<sup>3</sup> [https://www.kingscog.org/vertical/Sites/%7BC427AE30-9936-4733-B9D4-140709AD3BBF%7D/uploads/2019-03\\_KCAG\\_RATP\\_Final.pdf](https://www.kingscog.org/vertical/Sites/%7BC427AE30-9936-4733-B9D4-140709AD3BBF%7D/uploads/2019-03_KCAG_RATP_Final.pdf)

## Transportation Needs Assessment for Kettleman City

### California

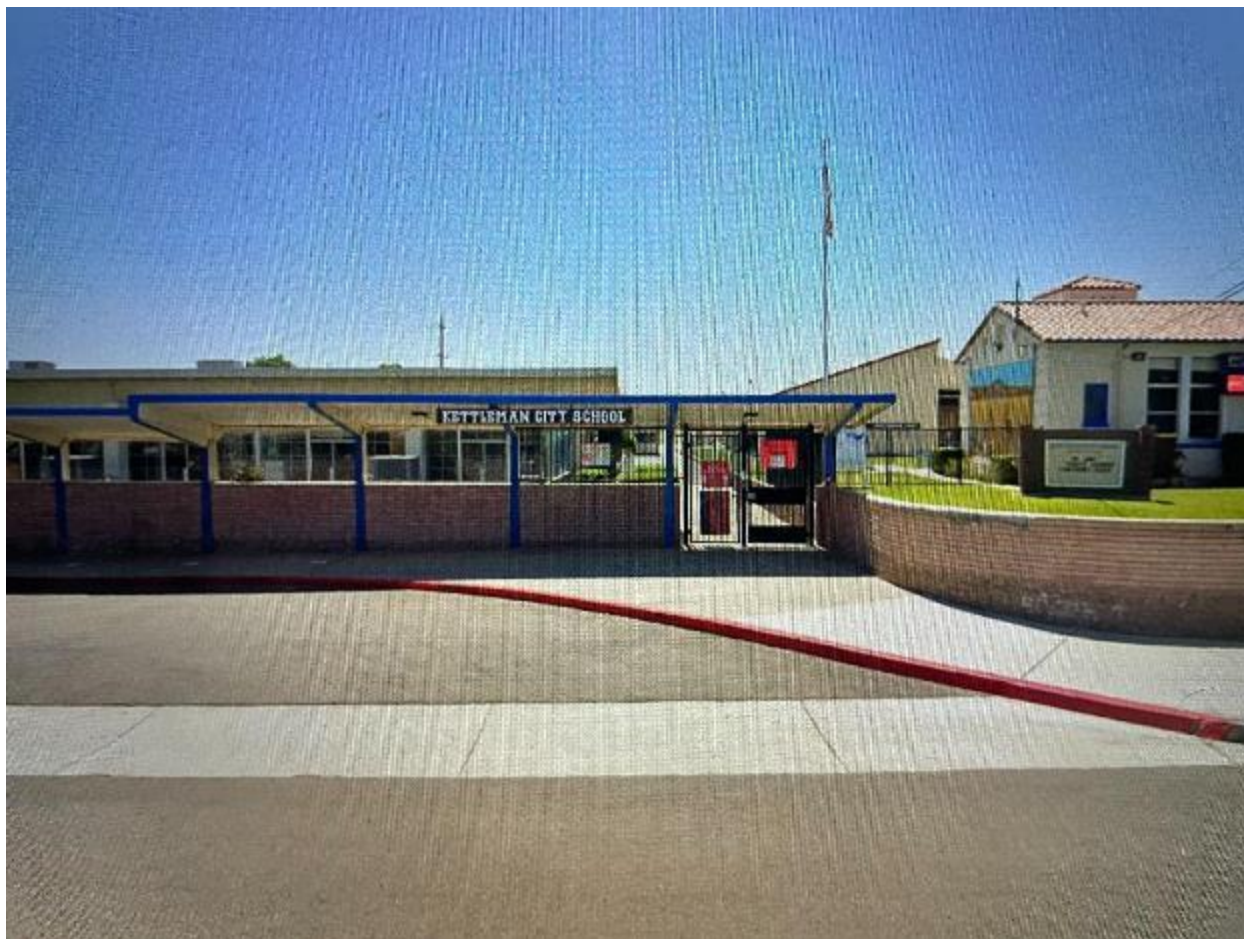


Figure 1: Kettleman City and Statewide Map

### Kettleman City Elementary School

Kettleman City Elementary School is a public school in Kettleman City, California that is part of Reef-Sunset Unified School District. The student population is 99% Latino@ with 94% of the student body eligible for free or reduced lunch. Schools in districts that mainly serve students of color receive substantially less state and local support than similar districts that serve primarily white students.

## Transportation Needs Assessment for Kettleman City



*Figure 2: Kettleman City School*

The Kettleman City community transportation needs will support identifying their transportation needs and evaluating transportation gaps to help in planning for future clean mobility projects. The LEAP Institute will focus on the lack of infrastructure and clean mobility transportation needs.

The LEAP will address the concerns that are vital to the community where the low-income and farmworker families have not obtained as much attention as necessary due to various factors, including limited resources invested, in addition to geographic and linguistic isolation. Some of these concerns include the length of time waiting for public transportation service, the distance these individuals must travel to medical appointments, to grocery stores to purchase food, and overall lack of safety when it comes to accessing public transportation. The LEAP Institute will develop solutions in connection with the residents.

The LEAP Institute has reviewed other local and regional transportation plans conducted in Kings County. These plans have served to highlight the lack of infrastructure that addresses the transportation and other health concerns in this impoverished community. As stated by the Greenlining Institute's Mobility Equity Framework "Decades of local, regional, and state transportation plans and investments in California have not adequately responded to the mobility needs of low-income communities of color, reinforcing unequal land-use patterns and

## **Transportation Needs Assessment for Kettleman City**

contributing to disproportionate health and economic impacts.” Kettleman City is an environmental justice community disproportionately impacted by air and water pollution. The current transit system is not efficient enough to give them better access to jobs, education, recreation, medical care and access to purchase healthy foods.

Kettleman City has had its share of community planning and organizing events surrounding the pollution and environmental hazards prevalent in the community. The same cannot be said about transportation planning. The community has not been actively involved in transportation planning events. The small size of the community and the lack of funding for community clean transportation and community mobility development.

### **Community Transportation Needs Assessment**

Prior to implementing car sharing and mobility hubs services, the project team led a community transportation needs assessment process (“needs assessment”) to understand residents’ current travel behavior and identify their transportation resources, needs, gaps in transit and challenges. The LEAP Institute method of operation with communities is always about learning what the community has, appreciates and what they need or want. It is important to begin where the local community finds itself in and learn from them to understand the community dynamics. This is a critical first step in identifying barriers, opportunities, and solutions best suited to meet the unique needs of residents in each community. The needs assessment also explored residents’ interest in each potential clean mobility option (e.g., bike sharing, e-scooters transit passes) to determine which to prioritize for each site.

The needs assessment was designed to:

- Understand residents’ current transportation habits, needs and wants.
- Understand challenges faced by residents in accessing and utilizing various mobility options for themselves and their family.
- Gauge residents’ current knowledge and interest in learning about clean mobility and using new shared mobility options.
- Understand the demographic profile of the residents. (100% Latino, mostly farmworker families, seniors).
- Collect baseline data to measure progress on project goals, e.g., access to destinations, mode shift, and car ownership.

Conducting a needs assessment is a valuable first step to empower residents to start carving out how investments can be used to provide them the transportation solutions they require for their communities. This is a key lesson for pilot project design, and an approach that can be modeled in other communities that want to increase access to clean transportation and mobility options.

### **Purpose of the Report**

This report was prepared to detail the steps taken by the project team to complete the needs assessment, summarize key findings, and share lessons learned. We intend for this report to serve as a helpful resource for other organizations considering conducting a transportation needs assessment in their own communities.

# Transportation Needs Assessment for Kettleman City

## Method

This section provides information on the approach taken to conduct a needs assessment in communities residing in Kettleman City. These methods were intended to be unique and specific to the residents served.

### Timeline



Figure 3: Timeline

An overall timeline of the activities conducted by the project team to complete the needs assessment is shown in Figure 3. The LEAP Institute took a direct community engagement approach, engaged residents and on-site partners, and integrated strategies that would best for Kettleman City.

### Designing Site Coordinator

The LEAP Institute and on-site partner (Kettleman City Elementary School) designated a site coordinator to guide site-level implementation throughout the course of this project and serve as the main point of contact. The site coordinator will be housed at The LEAP Institute with an estimated workload of 35-50% full time equivalent (FTE). Funding for these positions are provided through the CARB grant. Site Coordinator positions may not be necessary beyond the pilot phase of the project or may only be necessary at a lower FTE.

### Site-Level Team Recruitment

The initial process consisted of engagement with the communities of Kettleman City. Survey brainstorming focused the best survey questions necessary to gather the information which is required to proceed with the analysis. After the brainstorming session, we began to identify leaders from the community and collaboration ensued on the design, writing, and implementation of the survey. As we began to collect the data, we used Alchemer for further analysis. Throughout the first half of the year period, a team was set forth and established for survey distribution and collection in all intended areas. For the second half of the year period, data

## **Transportation Needs Assessment for Kettleman City**

entry proceeded; along with entering the survey results and analysis for further and final interpretations.

Many accessibility indicators were used and implemented into the survey to measure the current transportation modes that are currently accessible to the community. Some factors include of access to medical care facilities, pharmacies, social services, groceries and shopping, community meetings, and school functions<sup>4</sup>. Reliability of the current transportation modes in use was also in question to measure how safe and reliable it currently is.

Means to determine this was asked in a survey to determine if residents currently have transportation to a certain destination, and how long it currently takes them to reach their destination. Accessibility options determined affordability. The reason for these indicators is to determine how accessible the community is to get to important destinations and how long it takes them to get to each of the different sites. These indicators were thoroughly thought out by the Site-Level Team to access deeper information on the community for more accurate data on measuring their current accessibilities to the mentioned sites.

### **Survey Development**

The LEAP Institute conducted a transportation needs assessment survey. The intention was to determine the community's needs regarding their current travel behavior and preference for future transportation enhancements and projects. The survey was developed by pointing out certain features that were necessary to learn how the community is currently moving around, and the most frequent essential destinations. The residential survey consists of survey questions that deal with their transportation methods that they currently have or use, and in which areas are lacking.

The survey questions were meant to get a thorough analysis of what percentage of residents are having trouble with transportation and to have a better understanding of their needs in the community. Familiarity of transportation resources and access was considered as well.

The survey questions were planned for the resident survey with the intention of developing specific data and responses, also with methods of getting personal input from the survey respondents themselves. The questions were selected and published based on the fact they would produce specific outputs and results needed to determine in which areas transportation is difficult in, and to proceed with further movements and developments in the community and surrounding area.

Much of the population is Spanish speaking, but a strong sector of our effort is P'urhepecha speaking with Spanish as a second language. The survey was offered in Spanish and P'urhepecha, translated from the original survey language of English.

The residential surveys were administered with different methods involving house to house and store to store physical approach, as well as phone calls and tabling in the commercial area. The

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<sup>4</sup> Community Advisory members thought that community and school functions were essential to include.

## Transportation Needs Assessment for Kettleman City

reason that these options were selected is to ensure quality data and to get a more personal approach to build reputable results from the community. During the early part of 2021 it was difficult to try to engage people in person due to the delicate nature with the Corona-19 virus causing fear. Using posters with QR-codes was extremely ineffective. It took some time before the public was ready to be engaged. What was of tremendous assistance was our distribution of KN-95 face masks and sanitizer. Kettleman City advisers suggested that gift cards would not work and a raffle for bicycles would be better. The pandemic had an impact on all of our projects. The key was to have a consistent presence with locals that were familiar to the community.

### Survey Distribution and Collection

Data was collected through personal means such as door to door, store to store as well as calling on residents on their phone while tabling. This method is more reliable since it allows for more accurate data obtained from the primary source. The collection of the surveys spanned across multiple months, giving time for surveys from each site in Kettleman City to be inputted accurately, and analyzed thoroughly. An existing source utility known as Alchemer was used for the process of obtaining and processing the survey questions that were available for distribution across the communities.

The collection was conducted across a couple months for the time frame. This allowed for the process of survey gathering to be done accurately and efficiently for the data to be obtained. The process of collecting the data itself through the means of surveys was an interactive process in the means that the survey questions did not change, therefore it was a repeated process in trying to obtain data.

All surveys were done within the communities of Kettleman City. It was best to focus on a specific group and community, instead of collecting from a wider population, this way more accurate and specific data could be obtained. A goal for each site was set to be achieved during distribution. Each site in Kettleman City yielded a response rate of 90% or higher, with each goal for surveys obtained at each site being obtained and accomplished.

Incentives for the surveys were provided as well to ensure and reward the community for cooperating with accepting to share their experiences and answers to be used and obtained for data collecting purposes. The incentive to complete a survey was a \$10-to-\$20-dollar Food4Less or FoodMaxx gift card. Incentives were distributed by giving out the cards to the survey respondent or the codes on the back of the visa gift. Gift cards were handed to participants on the spot, others were mailed. To keep track of the distribution, the code of the gift cards was written on the surveys themselves.

Site	Surveyors	Distribution	Collection
Kettleman City	The LEAP Institute and Kettleman City Residents	Door-to-Door Store-to-Store Cell-Phones	Majority of surveys completed in-person or over cell-phone

*Figure 4: Survey Distribution and Collection Methods*

## **Transportation Needs Assessment for Kettleman City**

### **Community Engagement Rationale**

Farmworker communities have been disproportionately impacted by Covid for several reasons. They are now identified as ‘essential’ workers and have been a critical part of agricultural industry. In all agricultural regions farmworkers continued to be transported in vans and buses, while also continuing to commute together in personal vehicles. None of the vehicles used have HEPA standard air filtration systems to mitigate potential impacts of infection. It is a known fact that quality medical care is not as accessible and immigrant farm workers rarely have health care plans. Additionally, farmworker housing conditions pose another concern and risk factor for potential transmission and spread of the COVID-19 within the farmworker community (<https://www.farmworkerjustice.org/>).


The pandemic took a toll on farmworker communities throughout the state of California. Our advisors on the ground strongly recommended that we not have events where the potential would exist of infections occurring and potential deaths. We took this advice seriously and approached all our community engagement from door to door and store to store. At all sites we provided personal protection equipment, masks and sanitizer to respondents and anyone else who asked. The LEAP Institute took all safety measures available to protect the health of staff and community members during all activities.

The situation called for a guerrilla style approach that was direct with household representatives, parents, grandparents, or other adult household residents. The ideal was to have a community gathering where we would provide food, prizes, entertainment and potentially a charrette style activity to list and prioritize community needs for qualitative data acquisition. We couldn’t have it during the time period, but we intend to pursue something with the leaders that continue to work with us.

Bilingual posters, flyers and brochures were distributed before and during the surveys.

## Transportation Needs Assessment for Kettleman City


Have you found yourself without transportation to an important medical appointment, work, school, or groceries?  
Let's work together to change that!



The LEAP Institute is conducting a Clean Mobility Options (CMO) Transportation Needs Assessment. We want to hear about your transportation preferences and challenges to help us improve mobility options in

# KETTLEMAN CITY

Scan the QR code to go directly to the survey or visit: <https://bit.ly/LEAP-KC>  
The survey takes 20 minutes to complete.  
For questions call (559)-964-7802



CMO is part of California Climate Investments (CCI), a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.




Figure 5: English Brochures, Flyers & Posters with QR Code

## Transportation Needs Assessment for Kettleman City

¿Te has encontrado sin transporte a una cita médica importante, al trabajo, a la escuela o para hacer la compra?  
¡Trabajemos juntos para cambiar eso!



El Instituto LEAP está llevando a cabo una Evaluación de Necesidades de Transporte de Opciones de Movilidad Limpia (CMO). Queremos conocer tus preferencias y retos de transporte para ayudarnos a mejorar las opciones de movilidad en

# KETTLEMAN CITY

Escanea el código QR para ir directamente a la encuesta, visita el enlace, o llámanos:  
<https://bit.ly/LEAP-KC-Es>  
La encuesta tarda 20 minutos en completar.  
Si tienes preguntas llámanos al (559)-964-7802



CMO es parte de California Climate Investments (CCI), una iniciativa estatal que pone miles de millones de dólares de "Cap-and-Trade" a trabajar para reducir las emisiones de gases de efecto invernadero, fortalecer la economía y mejorar la salud pública y el medio ambiente, especialmente en las comunidades de bajos recursos.



Figure 6: Spanish Brochures, Flyers & Posters with QR Code

## Transportation Needs Assessment for Kettleman City

In total, 120 surveys were completed. The LEAP Institute staff attended a Health Fair on June 26th from 4 to 7pm to conduct outreach and distribute information on the Transportation Needs Assessment. More outreaches took place at the community event in the park in partnership with the local office of the Kings Community Action Organization - KCAO, held on October 22, 2021. The LEAP Institute conducted methods of distribution and gathering of surveys by door-to-door engagements, as well as receiving permission from local business owners to set up booths for engagement. People who approached our booth were granted collateral as an incentive for survey participation. 100 N-95 facemasks, and 112 eight-fluid ounce bottles of hand sanitizers were given in total. A second booth was set up in front of the Kettleman City Elementary/Middle School, and passing students were given collateral, and encouraged to bring an adult for surveying.



*Figure 7: LEAP Table Taking Surveys in Community Park. Tabling site served as base during one of the door to door survey implementation campaigns.*

Total number of surveys obtained in total was 120. Surveys conducted throughout the first dispatch day were a total of 8 surveys obtained by methods of canvassing, and around 37 names and signatures were obtained for future conduct of surveys, which resulted in 13 surveys completed from an on-the-phone approach. A second dispatch to gather surveys in Kettleman City began on October 18th and finished November 5th. It was done by Miguel Alatorre, community organizer and policy advocate, obtaining 99 total surveys through means of on the ground canvassing with our locally based team, finding outreach coordinators, calling list serves, sending out social media post and working with other LEAP staff, as well as helping to recruit a team of outreach workers in Kettleman City who helped engage the community door-to-door.

Site - Total
Kettleman City - 120

*Figure 8: Total Surveys Collected*

### Data Entry

Feedback and comment qualitative data are being stored in two different forms of storage, both digital and physical. Alchemer is an online tool being utilized by the organization to create, distribute, and store data gathered by means of either quantitative or qualitative answers from a set of specified populations. Another form of storage is having hard physical copies at the organization’s disposal. Storing the data in Alchemer was a conscious decision by The LEAP Institute based upon the way data is displayed and visualized once gathered. Alchemer

## Transportation Needs Assessment for Kettleman City

specialized in developing charts and diagrams to better represent and showcase the purpose and means of the data which other data processing software to the best of our knowledge falls behind with.

Certain data, such as qualitative data, is difficult, or sometimes impossible, to bring about and visualize using mathematical charts and diagrams that work well with quantitative variables. A process of data extraction was used to simply correct or better visualize the data in a different manner than what Alchemer was able to produce.

A certain characteristic when dealing with this data was the knowledge beforehand of knowing that the population sample was bilingual, meaning a translation of qualitative data was more than necessary. With all translation, data will need to be changed from one language to another, meaning that certain keywords or phrases will be transformed, or partially skewing the data to a certain extent to make it viable for the language needed.

Currently, existing transportation systems are limited within the community, ranging from only options of owning a car, and riding the bus as their only options. From the data that has been observed, it is likely that not many people have access to the current options, as reasons being that there is not enough funds to purchase their own vehicle, and the public transportation is unreliable as it takes too long to arrive, or even it does not take them to the destination which is needed.

According to residents from the data gathered, they have many needs for reliable transportation. Many have medical needs, which is that they need to pick up medicine from the pharmacy, and also arrive at their medical appointments on time, which is a difficult task with the current transportation that is available at the moment.

Site	Data Entry Strategy
Kettleman City	Alchemer Software

*Figure 9: Data Entry Strategy*

### Data Cleaning

All resident survey responses that were received were legitimate responses. The LEAP Institute made sure that the data received was indeed legitimate by conducting the surveys in person and face to face. This process eliminates any unknown factors and ensures secure and discrete data. While the surveys were coming in, we waited for a specific time to input and process them. The reason for this method is to be able to thoroughly collect all the data in a physical version, and to collect as much as to meet our specified goal of attained surveys. After the collection is complete, we count them and make sure we have met the quota, then begin to input them into the system for analysis to make sure that we have the required population sample before beginning the process of analyzing the data.

## **Transportation Needs Assessment for Kettleman City**

The process of data cleaning within the surveys was done by the organization. Everyone in The LEAP Institute had a helping hand in mining the data by physically gathering the data in a face-to-face manner with the population, counting the surveys to make sure the quota for the surveys received was met, as well as inputting the surveys into the system to be analyzed meanwhile highlighting every individual survey that has been inputted to prevent duplications within the data itself.

The population itself did maintain a boundary of only surveying people that were of age to legally obtain a driver's license or older. Any themes that were felt as unproductive or contradicting were addressed by allowing an option on the survey for people to be able to choose "none of the above" or also allow for multiple inputs if they felt more than one answer met their criteria. For handwritten inputs that were illegible or not understandable, they were highlighted and given a second evaluation by another member in order to make sure every survey provided the best data possible for the analysis.

The LEAP Institute performed additional data cleansing and double checking of responses to make sure the data is valid and as accurate as it can be. From these methods, and double checking of the responses, the information that was needed was obtained.

### **Data Analysis**

The LEAP Institute carried the analysis of the survey results through the online utility website known as Alchemer, and as well as Excel for specific needs. Qualitative data such as comments and other handwritten answers were further reviewed after input to utilize the results and find common themes amongst the population (e.g., many surveyors commented how they are looking forward to the new form of transportation to be able to get to where they need to go.)

All the data after input was analyzed by the specialized Data Analyst appointed by The Leap Institute in order to get the best understanding of the data which can be attained, and to complete a thorough analysis on the results.

## **Results**

### **Demographics**

The survey population for the residents of Kettleman City was a controlled population detailing only respondents who are of legal age to obtain a license or older. Much of the population in Kettleman City which were surveyed are Mexican or of Mexican descent (98.2%), with the majority speaking the Spanish language. Almost half (49.1%) of residents reside in owner occupied housing whereas 50.1% rent<sup>5</sup>.

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<sup>5</sup> <https://data.census.gov/cedsci/table?g=1600000US0638394&tid=ACSST5Y2019.S1101>

## Transportation Needs Assessment for Kettleman City

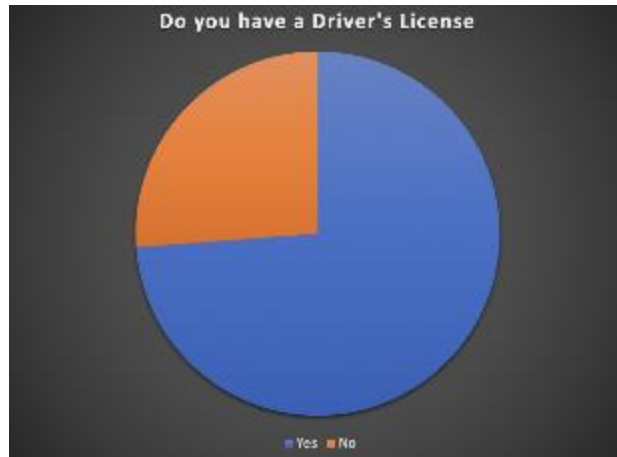


Figure 10: Kettleman City License to Drive

In Kettleman City, there is a great majority of the population which have obtained a license, but as results show, it is generally difficult to get around with their current transportation. Currently, around 74% of the survey respondents have obtained a license and are eligible to legally drive, but 70% have claimed that it is difficult to go where they need to go.

Kettleman City is a small town in which much of the community are farmworkers and the majority earn minimum wage. Around 54% of the survey respondents said that they possess 2 or more cars in their household, meanwhile the other 46% mentioned that they own either 1 car, or none, stating reasons why they do not own a car as shown in the graph. The majority of those who did not own a car said it was too costly to afford or maintain a vehicle.

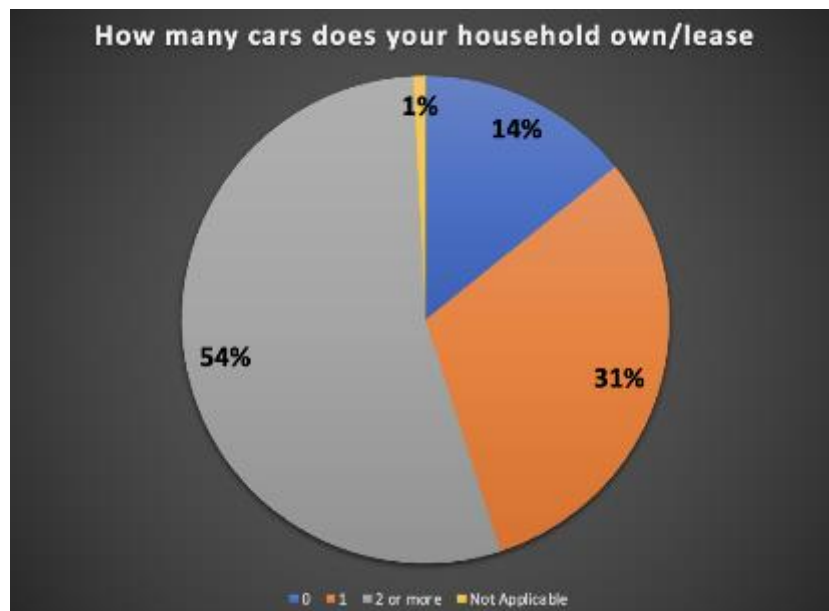


Figure 11: Kettleman City How Many Cars Owned

## Transportation Needs Assessment for Kettleman City

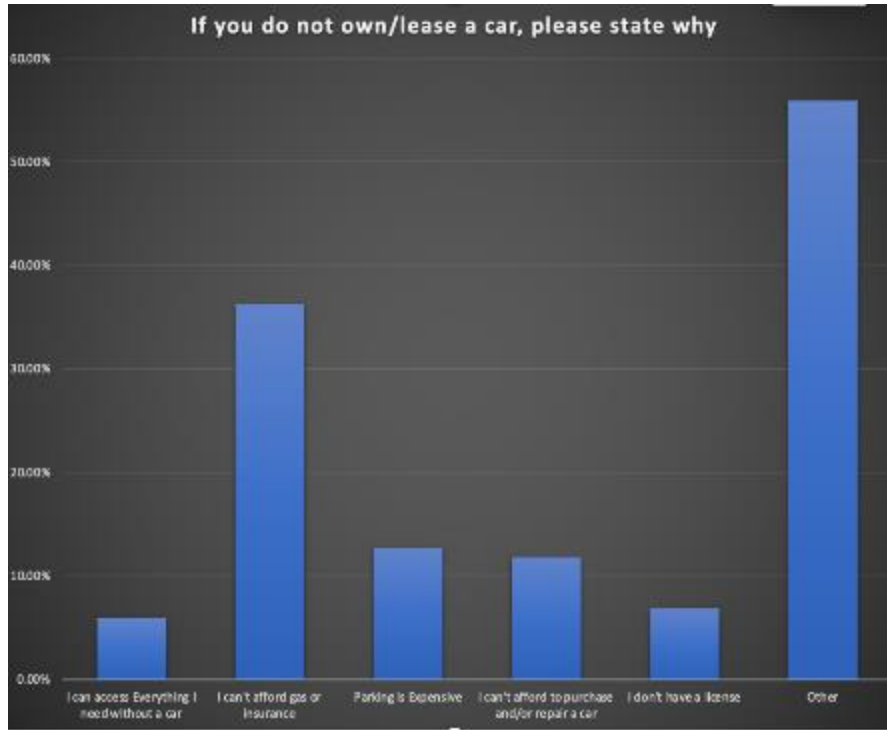


Figure 12: Kettleman City Reasons for Not Owning a Car

### Current Transportation Behavior and Preferred Transportation Benefits

The survey population of Kettleman City showed statistically that 70% acknowledged that it is generally easy for them to get around to where they need to go, while 30% claimed that it is difficult for them to get around.

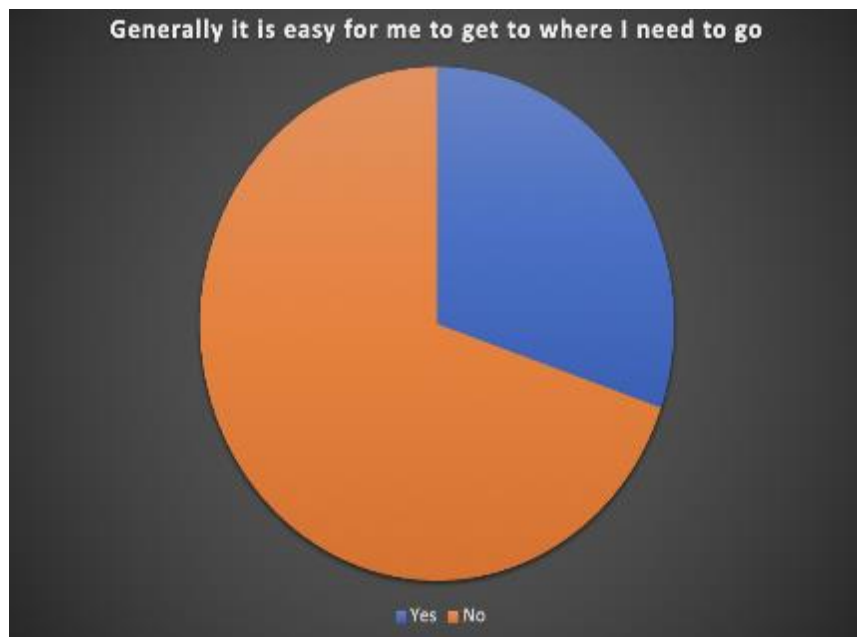


Figure 13: Kettleman City Ease of Mobility

# Transportation Needs Assessment for Kettleman City

## Alternative Transportation Methods

Alternative Transportations methods consist of ways to travel other than their own personal cars. This can include riding the bus, utilizing ride share programs, riding bicycles, scooters, or using Lyft and Uber in wealthier communities. Survey respondents in Kettleman City were asked specific questions to ensure what different types of transportation methods they currently have at their disposal. One survey question contained information if they currently own bicycles and utilize them, or if they do not. From the survey responses, 54% said that they have at least 1 bicycle in their household, and 47% do not own any bicycles at all. Reasons underlying why they do not own bicycles range from the respondents claiming that they are just too uncomfortable, as well as stating that they do not know how to ride a bicycle at all. Many others say that they cannot afford to purchase one, and that it seems unsafe for them to ride one.

Kettleman City has no bike lane infrastructure, no sidewalks nor curb and gutters. The good news is that the sidewalk infrastructure is being worked on for the next year, according to Supervisor Richard Valle. The other development that will soon be built will be a pedestrian bridge to cross the State Route 41 due to the high level of traffic impeding safe route to school for children that live on the east side of the 41 in Kettleman City.

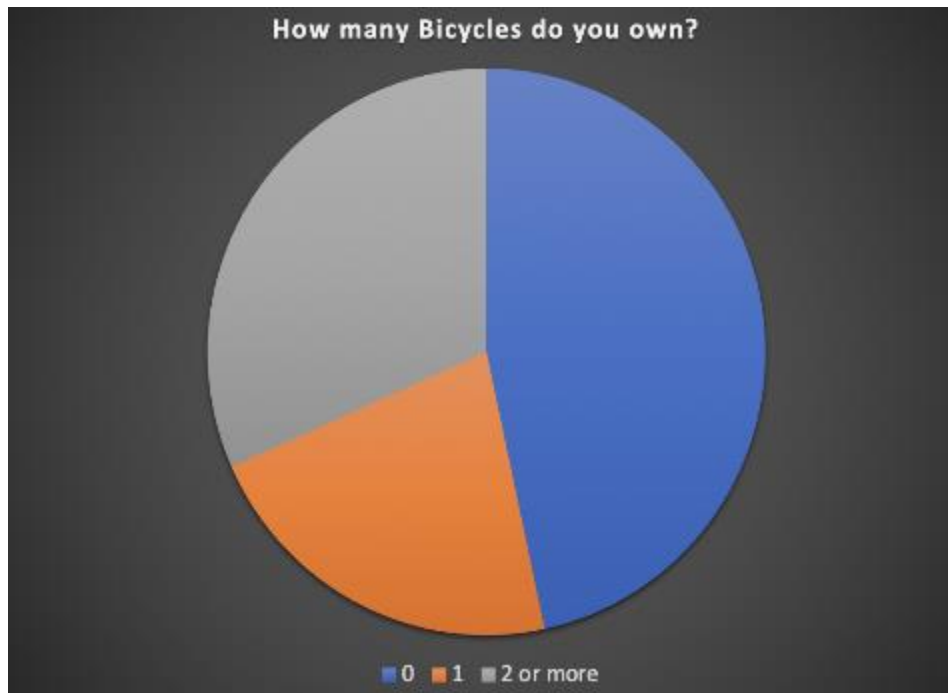


Figure 14: Kettleman City, How Many Bicycles Owned?

## Transportation Needs Assessment for Kettleman City

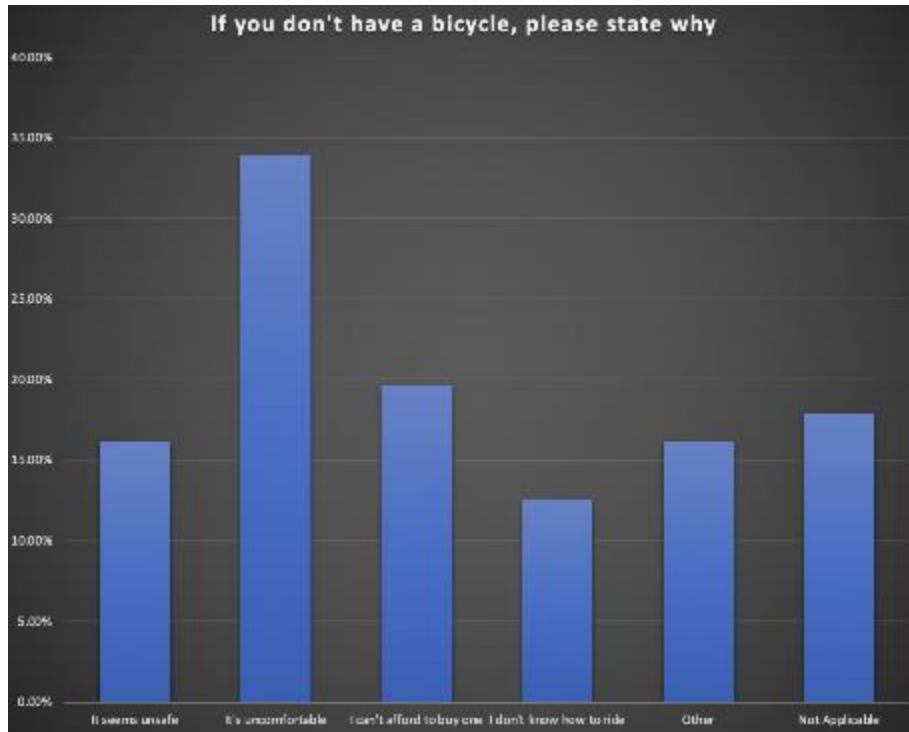


Figure 15: Kettleman City Reasons for Not Owning Bicycles

The survey respondents of Kettleman City were asked if they utilized their public transportation regularly. Results showed that many of the respondents' answered "No" with 74%, claiming that they do not use public transportation at all, meanwhile the other 18% answered "Yes", and this survey question did not apply to 8% of the respondents. For the survey respondents that answered "No," they were asked to specify their reasoning as to why.

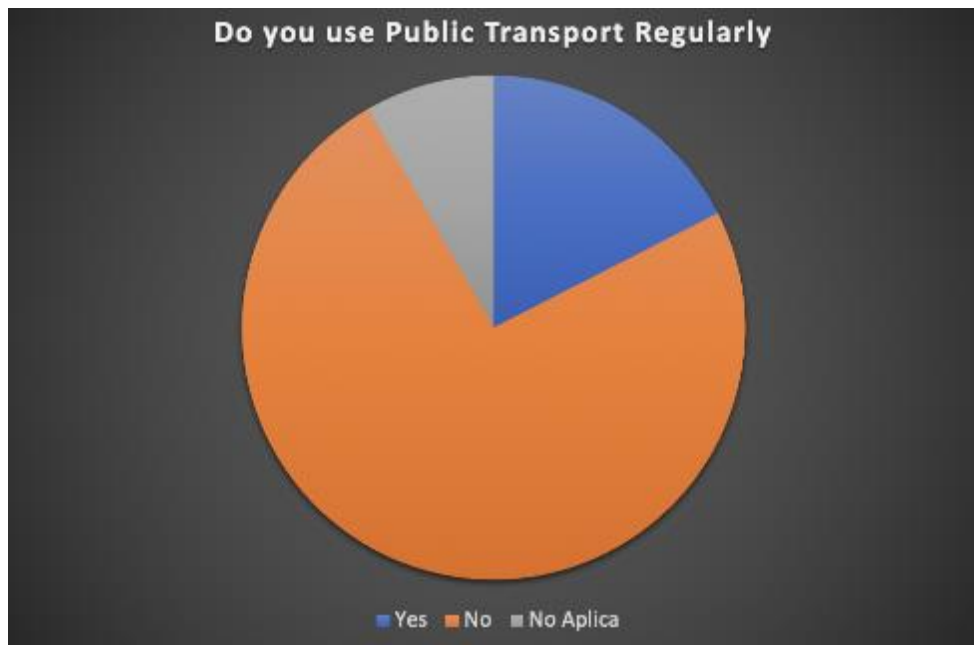


Figure 16: Kettleman City Public Transportation Regularity

## Transportation Needs Assessment for Kettleman City

Reasonings as to why they did not utilize the public transportation which their community provides proceeds with the majority claiming that public transportation takes too long to arrive, as well that it simply does not take them to where they need to go. Many others also feel as if riding the public transportation seems unsafe for them, and that there are no stops near their residence, therefore they do not have this access to public transportation.

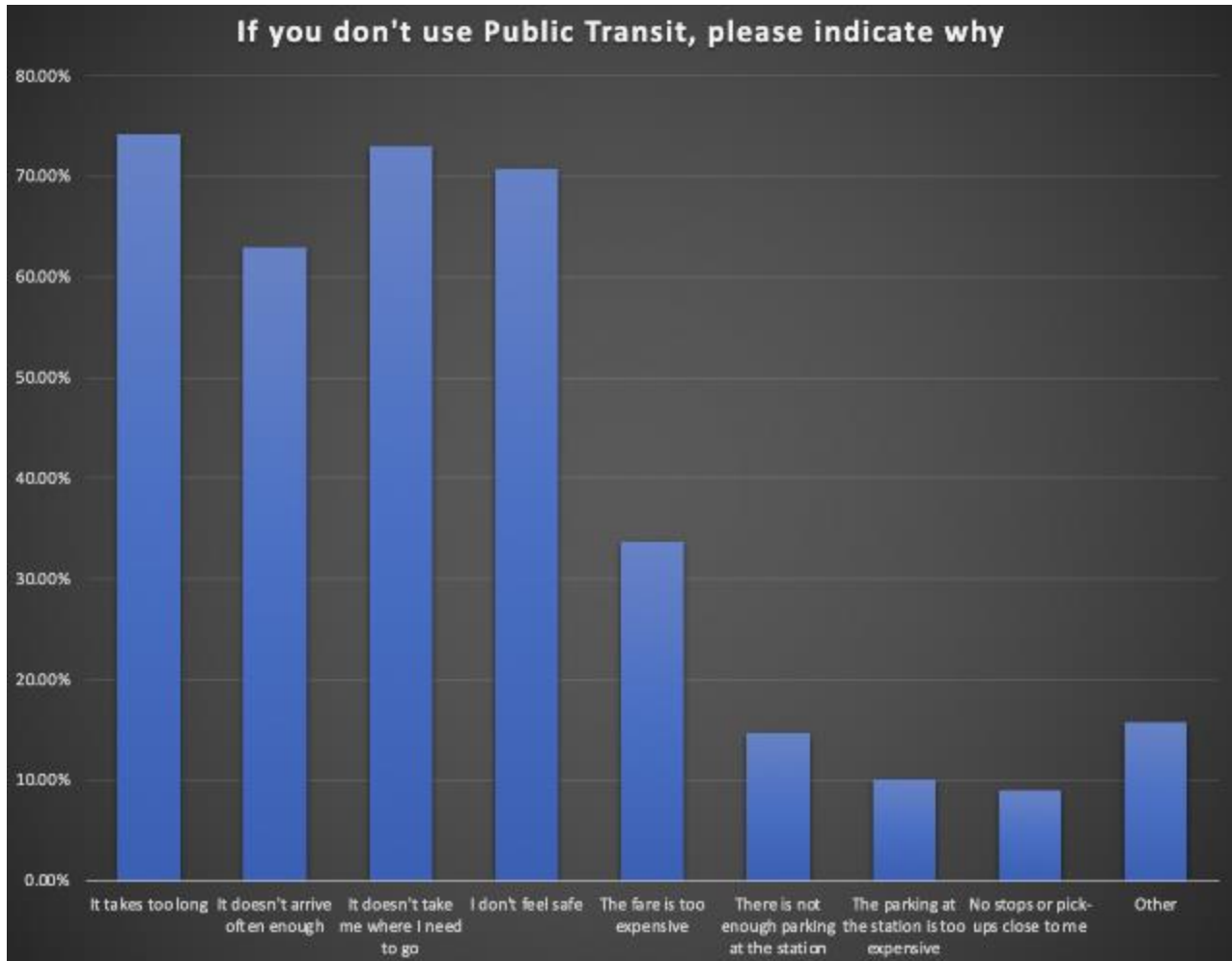


Figure 17: Kettleman City – Reasons to not take public transportation.

Going forth with the information and data gathered about their current public transportation, we took into account those that do ride it, we asked how long they are waiting for the transportation to arrive. From the sample population of those who do utilize public transportation in Kettleman City, it is known that 48% wait for more than one hour, 18% wait for 1 hour, 5% wait 30 minutes, 7% wait for 15 minutes, and 24% did not have an answer to provide. From this data, we can clearly conclude that the majority of people that do utilize public transportation need to wait at least 1 hour simply to ride the bus and get to where they need to go.

## Transportation Needs Assessment for Kettleman City

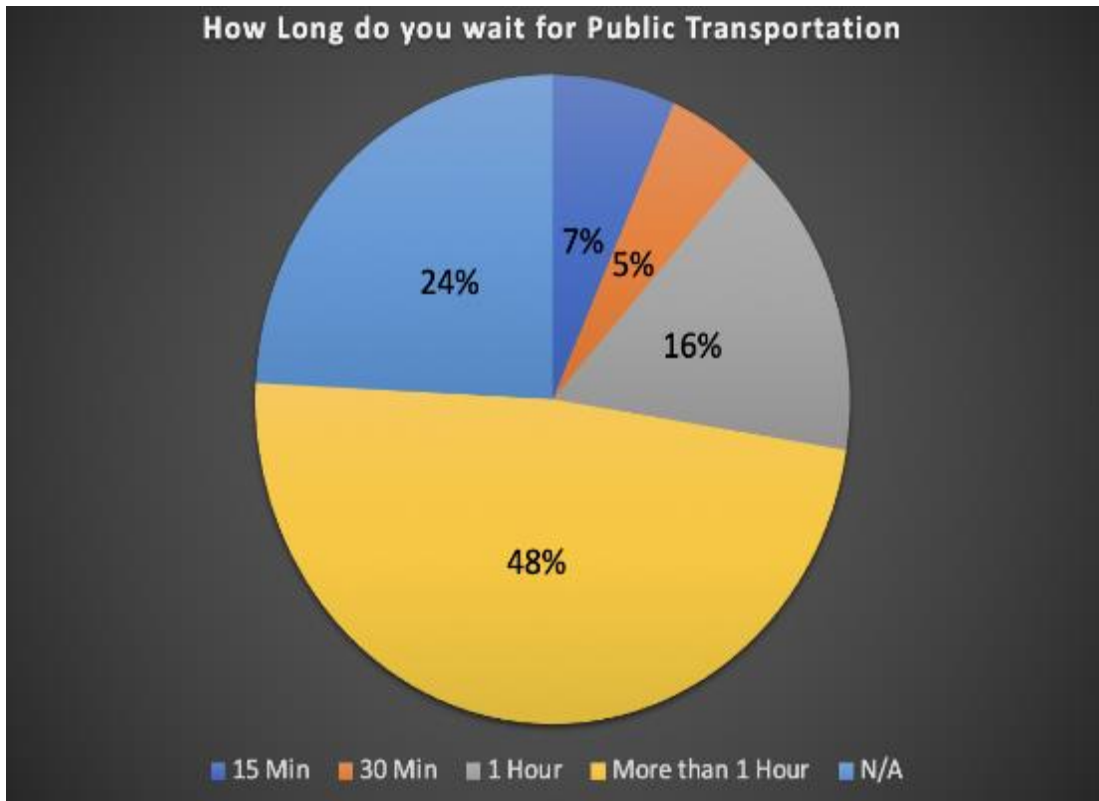


Figure 18: Kettleman City How long waiting for Public Transportation

### Familiarity with New Shared Mobility Options and Interest in Mode

Survey Respondents were asked questions to determine their level of familiarity with several programs that are currently available for access. The survey question asked survey respondents of Kettleman City to indicate whether they are “Very Familiar, Familiar, Moderately Familiar, Something Familiar, or not Familiar” with the shared mobility options that were presented. It became well known that most of the survey respondents in the community are not familiar and are not aware with the current transportation methods that are available. Spanning across all of the ride-share mobility options, there is an average of at least an 80% non-familiarity with any of the ride share programs. This is mainly concerning that they do not have the knowledge, or access to understand and learn what transportation methods are available for access or have not been implemented into Kettleman City.

## Transportation Needs Assessment for Kettleman City

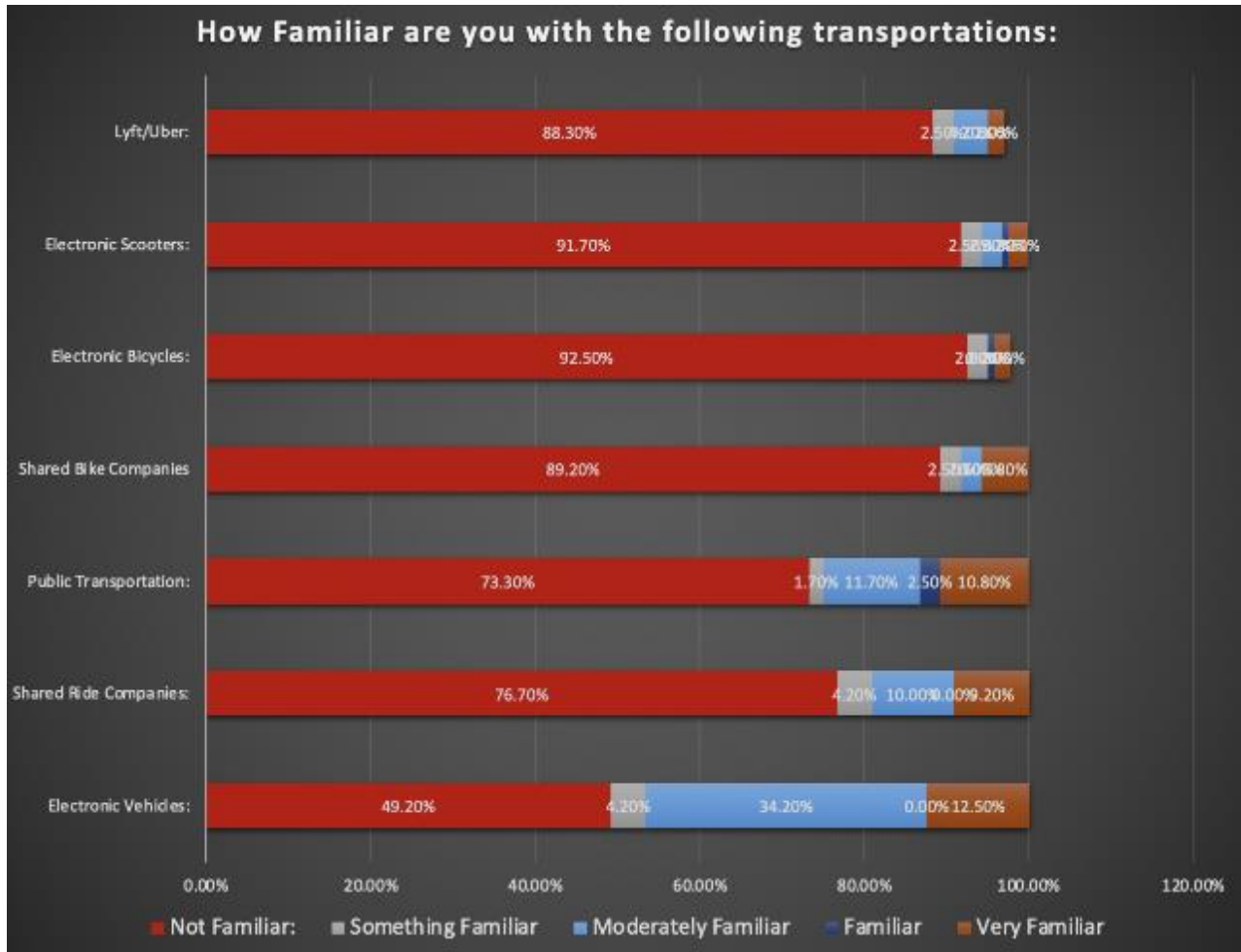


Figure 19: Kettleman City Familiarity with Types of Transportation

A preceding survey question, coming after their knowledge of familiarity with the shared mobility options, was asked to evaluate how they would utilize this form of transportation if they had the opportunities at their disposal. Certain locations, which were given as an option, were to “work”, “grocery shopping”, “recreation”, “school”, “medical appointments”, “social services”, and a last option of “other” was given with the ability to fill in their desired location of choice. Looking at the response results, it is well distributed amongst most common places such as “schools”, “work”, and “recreation,” and with “grocery shopping” coming in first with 25%. This establishes a certain characteristic, in which with more available means of transportation, much of the community of Kettleman City is willing to go to more recreational places, like parks or community centers.

## Transportation Needs Assessment for Kettleman City

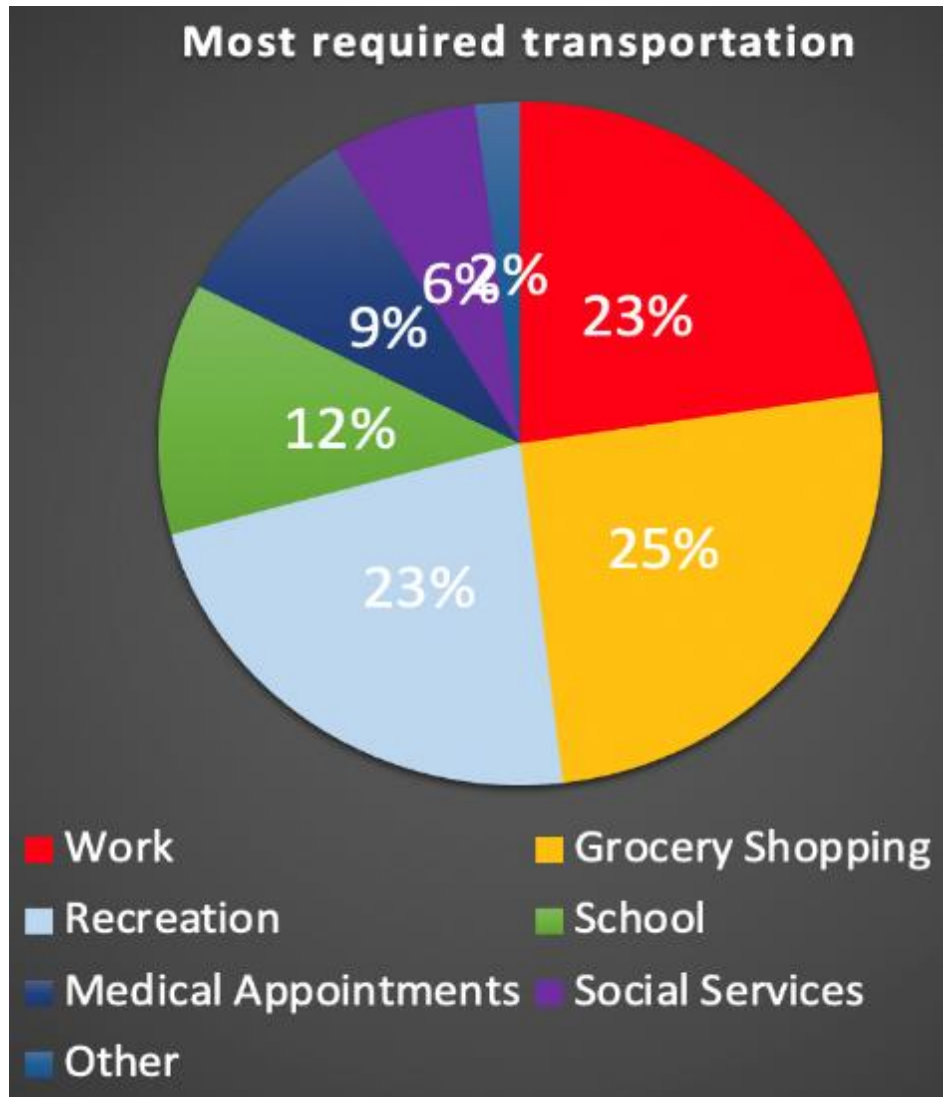


Figure 20: Kettleman City Most Required Transportation

Kettleman City has made it clear from the survey questions asking where they would frequent the most if having the shared mobility transportation at their disposal. It shows an average of above 90% that the community of Kettleman City is in need of shared mobility transportation programs and will be willing to use it for better accessibility to “Pharmacy,” “Schools/College/University,” “Medical Appointments,” “Scholarly Functions,” “Social Services,” “Grocery/Errands,” and “Reunions and Gatherings.” To further this analysis, another survey question was conducted asking the surveyed residents if they would utilize a free microbus, or one with low fees, if it was available for them to take to common destinations, and it resulted in a majority agreeing that it would be useful with a majority result of over 80%.

## Transportation Needs Assessment for Kettleman City

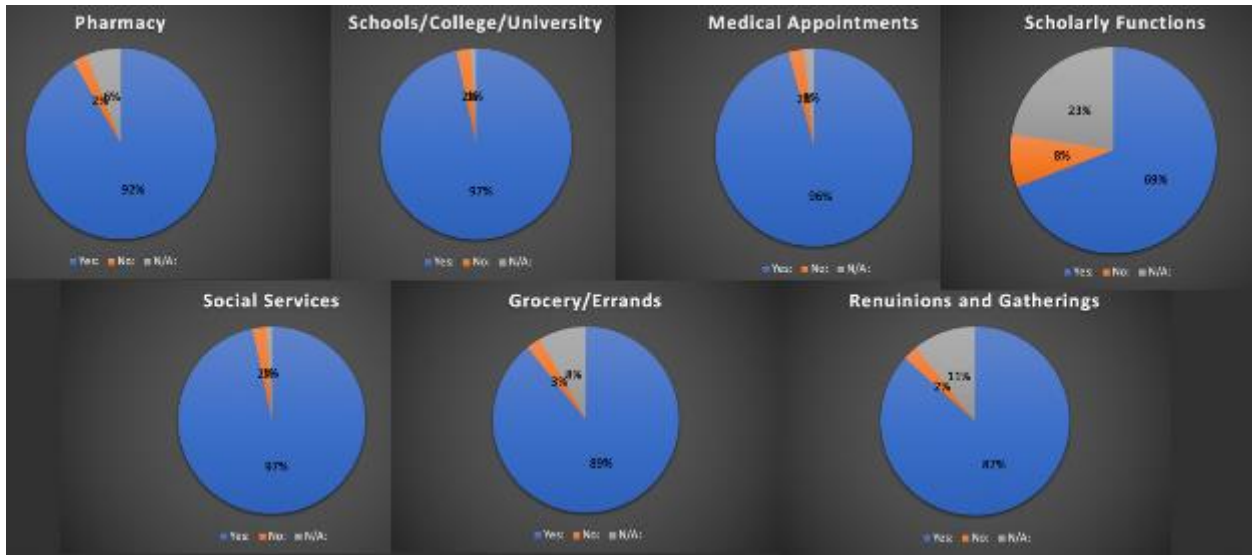


Figure 21: Kettleman City Destinations

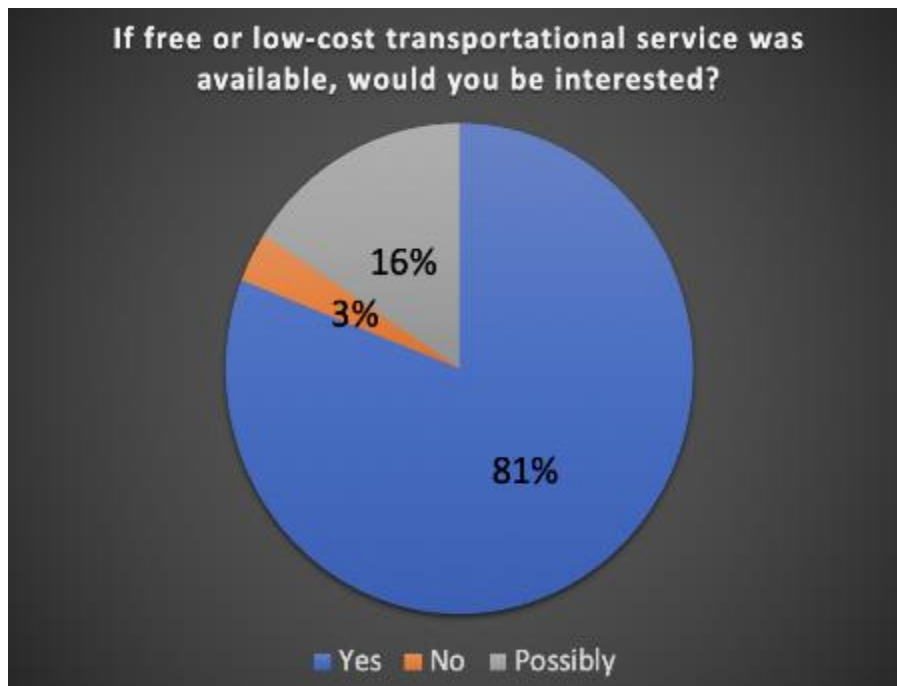


Figure 22: Kettleman City Inexpensive Transportation

## Limitations

Due to certain circumstances of the survey questionnaire, and limited use of alternative methods for gathering data, this research and analysis was utilizing mainly qualitative research methods of data mining. Because of this, certain data could not be transformed into quantitative percentages for reporting and conducting accurate analysis. Since the data relied heavily on survey

## **Transportation Needs Assessment for Kettleman City**

respondents, we were limited to the sample size of the community and were faced with a restraint that represented a certain percentage of the whole community.

During the data gathering process, certain limitations that were confronted were when residents of the community would decline or did not wish to participate in the survey. This situation narrows the community sample population for analysis, which increases the discrepancy and accuracy for quantitative data percentage to be implemented which will represent that specific community.

Time restraint was a factor when conducting thorough analysis, and data gathering. Due to recent pandemic situations with COVID, postponing survey conducts were necessary and important for the health of the community, and The LEAP Institute staff. This affected many things and pushed back the amount of research which could have been conducted otherwise. Because of this time restraint, gathering data and surveying residents of the communities came with difficulties, as well as the uneasiness of being approached for a survey questionnaire. This affected not only the time management, but also the sample size of the community.

Certain limitations dealing with report analysis conflicted when working as a team. Because of the lack of infrastructure cooperating tools such as utilizing Google Documents in which many can cooperate on one document as a team, a more personal approach was driven with the use of Microsoft Word. This limited and affected teamwork-based analysis and reporting, and instead isolation became more distressed. Cooperation with analysis and implementation of report sections became more difficult, with confusion and misunderstandings being brought forward.

The canvassing process in Kettleman City brought about similar limitations and difficulties. The residents of these areas showed distrust during the surveying process and would often question what the trade-off was for their willingness to participate. These closed-knit communities are often suspicious of outsiders which complicates the relationship. Even with the offer of free hand sanitizers and facemasks as collateral, they were still hesitant to engage. The LEAP Institute worked with El Pueblo in Kettleman City to resolve the challenge.

Additionally, the timing may have contributed to the limitations. There was the worry and fear of COVID-19. The pandemic was still occurring when the surveys were conducted. This made it difficult to actively engage the public in larger groups. One-on-one interactions were favored to decrease the probability of contracting the virus and to follow the FDA and California government's mandates regarding the pandemic and social distancing. It was also mid-summer in California. During this time, the temperature reaches the three digits (Fahrenheit) and becomes increasingly hot. The heat correlated with both mental and physical fatigue. The hotter hours during the day were avoided; therefore, there was less time utilized for canvassing. The heat also affected the residents' willingness to participate in a 15-minute survey. They stated that it was too hot to stand outside with no form of conditioning or shade. An attempt was made to solve this problem by utilizing door-to-door canvassing, but this caused another limitation.

When canvassing, there was limited internet access. Phones and tablets were used at first to conduct the surveys. The hotspot or internet carrier would drop in the surveying process which

## **Transportation Needs Assessment for Kettleman City**

resulted in having to input the answers again. This prolonged the survey and created a sense of dissatisfaction with the process.

# Transportation Needs Assessment for Kettleman City

## Discussion & Solutions

This section details key findings from the needs assessment results and how they used to shape an implementation plan for each site's mobility hub. The section highlights lessons learned and solutions to consider when conducting a needs assessment.

### Key Findings from Needs Assessment Results

What are the underlying causes of mobility gaps and challenges in the project area?

- Communities engaged are, for the most part, geographically and linguistically isolated. Public transit, even when available, has gaps and becomes insufficient for many, especially ADA and seniors. In Kettleman City, a community in Kings County on the far west side of the region finds itself isolated with only a commercial corridor on Interstate 5 as its neighbor. It is a recipient of the bus route that transports Avenal residents twice a day, during the week, once in the morning to Hanford and it returns in the evening. One resident shared that the problem was that the bus could not provide him a ride to work. He was forced to purchase a used polluting vehicle. Residents were unfamiliar with transportation network companies and the extent of ridesharing was limited to riding with family, friends or colleagues. Moms and elders shared their lack of interest in sharing bicycles or e-bikes but showed interest in e-tricycles that they could use to go to market with their children and without the concern of needing to balance a bike on the road near large vehicles.

What factors could contribute to successful transportation options in the project area?

- Green Raiteros (GR), the pioneering EV rural ridesharing program grown from the old practice used by farmworkers in Huron, California, has proved very successful. Apart from bridging the gap in access to essential appointments such as medical, social service and covid testing and vaccination, it has been evolving and upgrading to also empower the workforce from isolated communities to training sites to build skills and advance upward socio-economic mobility. Most recently, GR has added a program with 7-seater Tesla Y's that will transport students to college and universities as well as an enrichment and wellness component for the whole family with weekend trips to coastal parks, sponsored by California State Parks and supported by Save the Redwoods League. Farmworker families do not have the resources, awareness or the transportation to enjoy the green emeralds our state has to offer. Simultaneously, locals are employed, gain professional experience and can ascend into other opportunities. All the while, families become familiarized with electric vehicles that do not pollute their breathing air or contribute to the climate crisis.

What actions could be taken to enhance clean mobility in the community? How did you identify and prioritize these actions?

- Electric transportation not fossil fuel transport. The technology exists and is becoming more accessible, both the EV's and the infrastructure. The LEAP Institute has worked

## Transportation Needs Assessment for Kettleman City

with numerous EV charger installation companies to encourage and advance EV infrastructure in farmworker regions including the area we administered surveys in Kettleman City. The idea of riding in a quiet, comfortable, smart vehicle with features to make the trip safer and healthy for all is definitely capturing the imagination and interest of residents in all communities. “Pues, si no contamina, mejor” [Well, if it doesn’t pollute, better], shared an elder. The farmworker, Latino and P’urhepecha communities have one strong bond that connects them all apart from many customs, some traditional foods and most frequently common language of Spanish and that is a communal likeness of support. The raitero (raitero from the Spanglish word ‘raite’ or ride. A raitero is both the driver and the rider) concept of ridesharing and ride hailing has been around long before Uber or Lyft in these communities. Before it was sexy but due to historical racism such as redlining by financial institutions and other mechanisms of undermining wealth creation and economic advancement, this concept, practice and business opportunity was suppressed. Economic opportunities for economic upward mobility are limited in these communities and many times constricts the potential of the next generation. These are the same communities that are overlooked and underinvested in when it comes to infrastructure, amenities but always disproportionately impacted with more polluted air and contaminated water. These communities too are the ones bearing the worst impacts from the climate crisis, a man-made problem not of their own device.

What is the transportation planning process like in your community? Who is/are the lead entity and who has been traditionally involved or excluded from transportation planning?

- Priority community residents are left out, especially if they are not English speakers residing in more well-to-do areas where more amenities are developed. It becomes worse for those that only speak Spanish and it only becomes more challenging for communities that speak Spanish as a second language. This applies also to indigenous farmworker communities from other parts of ‘mesoamerica’ such as the state of Oaxaca and Guatemala where they speak multiple native languages and reside in all the areas where we have implemented the assessment tool.

What populations in the community have been traditionally underrepresented?

- Migrant farmworker families living in low-income rural communities lack the infrastructure for a good quality of life. The models of clean mobility that The LEAP Institute has already implemented provides an ideal option for farmworker rural communities throughout the state. The LEAP Institute was born from the same people and descendants that have grown up witnessing the challenges and fighting for the resources that for generations, went face first into brick walls. Still today, we have witnessed municipal governments hire consultants that capture .01% of the population's opinions on their needs, wants and transportation gaps with most of that meager number hailing from upper income or middle-class sectors of the society. CMO TNA is a great model to engage the working class, on the ground, to intimately acquire a colorful picture of what exists, what doesn’t and what is not working to bridge the gaps.

# **Transportation Needs Assessment for Kettleman City**

## **Lessons Learned from the Needs Assessment Process**

### 1. People are over surveyed

Survey fatigue is real & many community members experienced this. In the community of Kettleman City especially which suffers from various environmental injustices, this population is continuously turned to for information on these issues. Our onsite project partners advised us of this which led us to take a different approach as to how we can engage the community.

### 2. You need research infrastructure. Invest in these tools.

When the LEAP Institute was on site in the community of Kettleman City, weak internet connection hindered our ability to conduct surveys dramatically. As we moved forward with our door-to-door strategy we quickly realized that a stable internet connection was crucial to conducting the survey via smart tablet.

### 3. A more developed survey equals an easier conducting process

The survey that was developed was fairly long. It would take an average of 12 minutes to complete. As the survey was conducted, we realized that some questions could have been shortened or combined to receive the same insights and results with less questions.

### 4. Stay on your feet, be creative with talking points

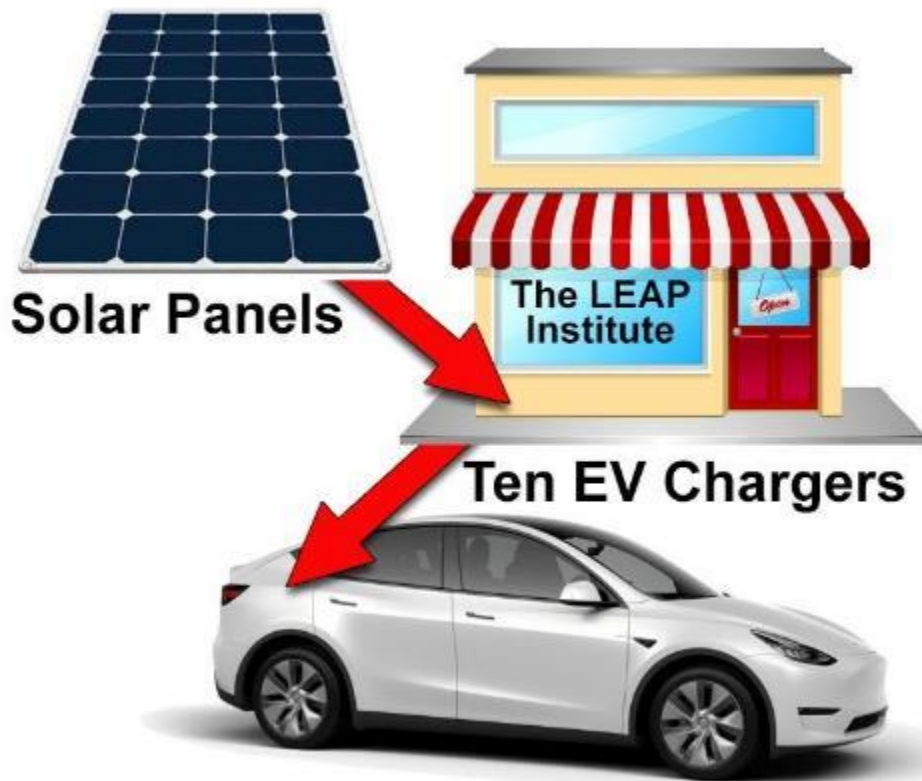
One of the challenges faced was that community members were unfamiliar with some of the alternative transportation methods so they would quickly lose interest. During training staff came up with multiple talking points that engaged residents on issues that mattered to them. Although they were unfamiliar with electric vehicles, they were very familiar with the bad air quality around them. We found these points to draw the community in.

## Transportation Needs Assessment for Kettleman City

### Conclusion

Communities engaged are, for the most part, geographically and linguistically isolated. Public transit, even when available, has gaps and becomes insufficient for many, especially ADA and seniors. In Kettleman City, a community in Kings County on the far west side of the region finds itself isolated with only a commercial corridor on Interstate 5 as it's neighbor. It is a recipient of the bus route that transports Avenal residents twice a day, during the week, once in the morning to Hanford and it returns in the evening. One resident shared that the problem was that the bus could not provide him a ride to work when he started to uplift himself. He was forced to purchase a used polluting vehicle. Residents were unfamiliar with transportation network companies and the extent of ridesharing was limited to riding with family, friends or colleagues. Moms and elders shared their lack of interest in sharing bicycles or e-bikes but showed interest in e-tricycles that they could use to go to market with their children and without the concern of needing to balance a bike on the road near large vehicles.

Green Raiteros and Green Cruisers, passenger EVs and electric micro mobility for first and last mile, and within 3 miles of the locations.



*Figure 23: EVs Powered by On-site Renewable Energy*

Green Raiteros (GR), the pioneering EV rural ridesharing program grown from the old practice used by farmworkers in Huron, California, has proved very successful. Apart from bridging the gap in access to essential appointments such as medical, social service and covid testing and

## Transportation Needs Assessment for Kettleman City

vaccination, it has been evolving and upgrading to also empower the workforce from isolated communities to training sites to build skills and advance upward socio-economic mobility. Most recently, GR has added a program with 7-seater Tesla Y's that will transport students to college and universities as well as an enrichment and wellness component for the whole family with weekend trips to coastal parks, sponsored by California State Parks and supported by Save the Redwoods League. Farmworker families do not have the resources, awareness or the transportation to enjoy the green emeralds our state has to offer. Simultaneously, locals are employed, gain professional experience and can ascend into other opportunities. All the while, families become familiarized with electric vehicles that do not pollute their breathing air or contribute to the climate crisis.

Green Cruisers is an extension of GR using electric tricycles or e-trikes. Studies show that most riders are older white males, and we believe we can change that with e-trikes. In our interviews with Latina moms and elderly retired farmworkers we found that tricycles are more attractive to them because they feel they are safer than bicycles. The added benefit of being able to transport children and groceries takes it over the top. Small businesses in other communities shared the interest of using e-trikes for delivery as well.



*Figure 24: Vendor e-Trike*

Electric transportation not fossil fuel transport. The technology exists and is becoming more accessible, both the EV's and the infrastructure. The LEAP Institute has worked with numerous EV charger installation companies to encourage and advance EV infrastructure in farmworker regions including the areas we administered surveys in Kettleman City. The idea of riding in a quiet, comfortable, smart vehicle with features to make the trip safer and healthy for all is definitely capturing the imagination and interest of residents in all communities. “Pues, si no contamina, mejor” [Well, if it doesn't pollute, better] shared an elder. The farmworker, Latino and P'urhepecha communities have one strong bond that connects them all apart from many customs, some traditional foods and most frequently common language of Spanish and that is a communal likeness of support. The raitero (raitero from the Spanglish word 'raite' or ride. A raitero is both the driver and the rider) concept of ridesharing and ride hailing has been around long before Uber or Lyft in these communities. Before it was sexy but due to historical racism such as redlining by financial institutions and other mechanisms of undermining wealth creation and economic advancement, this concept, practice and business opportunity was suppressed. Economic opportunities for economic upward mobility are limited in these

## Transportation Needs Assessment for Kettleman City

communities and many times constricts the potential of the next generation. These are the same communities that are overlooked and underinvested in when it comes to infrastructure, amenities but always disproportionately impacted with more polluted air and contaminated water. These communities too are the ones bearing the worst impacts from the climate crisis, a man-made problem not of their own device.

Priority populations need transportation to get to non-emergency medical appointments, social services, apprenticeship programs, work, school, shopping and enrichment. Traditional transportation systems are useful but fall short in meeting all the essential needs of the families with the least.

Docking/charging station with solar awnings to also serve as clean energy emergency islands to provide a pedestrian refuge under the shade, charge personal devices, access WiFi and receive alerts when air is too contaminated, or a dust storm is approaching. These scenarios are unfortunate real ones, particularly in the San Joaquin and Coachella Valley's. Traditional transportation systems are slow and don't go where people want to go. That is the reason Uber and Lyft are popular in wealthier communities. Priority community residents are left out, especially if they are not English speakers residing in more well-to-do areas where more amenities are developed. It becomes worse for those that only speak Spanish and it only becomes more challenging for communities that speak Spanish as a second language like the P'urhepecha families in the Eastern Coachella Valley. This applies also to indigenous farmworker communities from other parts of 'mesoamerica' such as the state of Oaxaca and Guatemala where they speak multiple native languages and reside in all the areas where we have implemented the assessment tool.



*Figure 25: Solar Docking/Charging Station for Electric Micromobility*

Established and migrant farmworker families living in low-income rural communities that lack the infrastructure to uplift quality of life. The models of clean mobility that LEAP has already implemented provides an ideal option for farmworker rural communities throughout the state because they were born from the same people and descendants that have grown up witnessing the challenges and fighting for the resources, that for generations, went face first into brick

## **Transportation Needs Assessment for Kettleman City**

walls. Still today, we have witnessed municipal governments hire consultants that capture .01% of the population's opinions on their needs, wants and transportation gaps with the majority of that meager number hailing from upper income or middle-class sectors of the society. CMO TNA is a great model to engage the working class, on the ground, to intimately acquire a colorful picture of what exists, what doesn't and what is not working to bridge the gaps.

Not only affluent families have interest in having amenities that work, but are efficient and effective in covering the needs of the most essential things in life. Working families also have the aspiration of experiencing public resources that they can count on and live a more comfortable life when they have leisure and are not entrenched in the farm fields of our rich state that feed the nation. To some extent and at times exaggerated by few, farmworkers nod almost facetiously as to being fed a pipe dream. The unfortunate fact of the absence of investments in their humble communities have all but concreted a perception of how society is in our Golden state. We know it can be different and lean on the energy and comprehension of the agencies to lead innovation for equity and demystify. Door to doctor and door to store is obviously one of the preferred services residents in all communities showed favor for. Using micromobility to bridge the gaps and what we call, nano-mobility (e-trikes, e-bikes, e-scooters) to get to the bridge for those able to do so, if not to make the short trips to local market while pedaling in some necessary exercise. Lighting is also an important matter in these communities. Many times, it is too costly for the utility to install new infrastructure to illuminate dark neighborhoods or streets. LEAP innovations have evolved around the need's farmworker community's demand. As such, the LEAP Smart Light (LSL) is what we will be installing in one of the communities already (Huron, CA). These LSLs are LED lighting with solar, storage and charging for personal devices and nano-mobility. LSL's also can be accompanied with WiFi capacity (another huge need in low-income communities), DYLOS air quality monitors and other safety elements.