An aerial cable car urban transit system serving the La Paz–El Alto metropolitan area in Bolivia; the first public transport system in La Paz designed for equitable access, and improved accessibility and connection between two socioeconomic urban areas.

Mi Teleférico is an aerial cable car system connecting Bolivia’s capital La Paz with the fast-growing centre of El Alto. Together, the two cities create the world’s highest metropolitan area at more than 3,650 metres above sea level.

La Paz and El Alto may be close geographically but moving between them by road can take hours, due to the winding route and traffic congestion. Mi Teleférico gives people a more efficient, affordable and reliable way of getting to work and school or accessing services.

Bolivia is the first country to use cable cars as the backbone of the public transport system and Mi Teleférico is the largest aerial cable car network in the world. It is accessible to all, and support and preferential treatment is offered to people with disabilities or mobility challenges, and others in need. Specific programs for women and young people have also been developed to promote social inclusion.

Strong political support from the central and local governments has been key to achieving the project’s social inclusion objectives. Social inclusion is the focus of the current government’s Agenda Patriótica (national development plan). Support from the government has also been essential to the successful implementation and expansion of the network to reach a wider population.
Project Overview

**Key words**  
Disability/impaired mobility, accessibility, governance, policy and standards

**Sector**  
Transportation

**Background**  
La Paz has a population of more than 800,000 people and is the highest capital in the world at over 3,650 metres above sea level. It is part of the La Paz-El Alto metropolitan area, which has a combined population of 2.8 million citizens.

El Alto is a fast-growing city with one million people living at over 4,000 metres above sea level. Every day, 440,000 commuters from El Alto travel to La Paz to work. The volume of traffic pushed the existing infrastructure to the brink of collapse. Cars, minibuses and fixed-route taxis often take an hour or more to travel the short distance on the mountainous roads.

**Size**  
Phase I: USD 235 million\(^3\)  
Phase II: USD 506 million\(^4\)

**Stage**  
Phase I: 2012-2014 (operational): three lines\(^5\)  
Phase II: 2014-2018 (operational): four additional lines\(^6\)  
Phase III: Current (in planning): four new lines\(^7\)

**Why of interest**  
- The first public transport system in Bolivia to address the needs of people with disabilities or impaired mobility
- Innovative transport solution that addresses the challenges of the high altitude La Paz-El Alto metropolitan area
- Connects two different socioeconomic urban areas, increasing access to labour market opportunities
- Significant political support, alignment with national policies and plans, and legislation and standards developed specifically for the project
- Changed the legal and regulatory framework, increased private sector involvement in public infrastructure projects
- One of the few mass transport systems in Latin America to achieve financial sustainability with an accumulated surplus of USD 5.8 million

**Project objectives**  
- Provide a safe and reliable upgrade to a public transport system that could not cope with growing user demands
- Increase affordability and decrease the time it takes to travel between La Paz and El Alto
- Reduce environmental and noise pollution produced by the network of gasoline and diesel-fuelled buses and minibuses in the metropolitan area
- Reduce over-reliance on the bus network, which is heavily supported by the government’s fuel subsidies

\(^1\) Estimates from Doppelmayr and the Inter-American Development Bank (IADB).
\(^2\) Distance from the International Airport in El Alto to La Paz Train Station is 8 kilometres. The trip takes about 30 minutes by car or over an hour by mini-buses.
\(^3\) USD 234,680,000. Ministry of Public Works, Services and Housing, Bolivia (2013).
\(^4\) The project was financed by the country’s National Treasury with an internal loan from the Central Bank of Bolivia. Funding for the last line (Silver Line) is being discussed with the IADB for a loan of USD 40 million and the line is expected to commence operations in 2019.
\(^5\) Red Line (Línea Roja), Yellow Line (Línea Amarilla), and Green Line (Línea Verde).
\(^6\) Blue Line (Línea Azul), Orange Line (Línea Naranja), White Line (Línea Blanca) and the first section of the Sky Blue Line (Línea Celeste).
\(^7\) Purple Line (Línea Morada), Brown Line (Línea Café), Silver Line (Línea Plateada), and Gold Line (Línea Dorada).
Project Lifecycle Assessment

**Project preparation** – presidential support and specific legislation was put in place to implement the project. Standards were adapted to the local context through a review of local, national and international practices. Targeted stakeholder engagement (e.g. people with disabilities or impaired mobility) was conducted. Baseline data was collected.

**Project procurement** – construction, operation and maintenance contracts included requirements for capacity building for the local workforce.

**Construction** – no relevant practices identified.

**Project monitoring and evaluation** – targets were set for the employment of women and people with disabilities or impaired mobility within Mi Teleférico. Capacity building was performed. Annual reporting and periodic monitoring of indicators against baseline data continues.

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**Project Description**

Mi Teleférico (which translates to *my cable car*) is an aerial cable car system that serves the world’s highest metropolitan area, La Paz–El Alto in Bolivia. La Paz, the country’s capital, is 3,650 metres above sea level and has a population of more than 800,000 people. The growing city of El Alto, which is more than 4,000 metres above sea level, is located above La Paz on the Altiplano plateau and is a poorer urban area. The majority of its one million residents are Aymaran, an indigenous group of the Andes region.

Mi Teleférico holds two world records: it is the world’s longest ropeway project¹ and the world’s highest cable car system. It currently consists of 23 kilometres (km) of lines and has 20 stations along six routes. It will be expanded to at least 34 km with five additional lines and a total of 30 stations. Each line has a maximum capacity of 6,000 passengers per hour. Each car seats 10 passengers. Cars depart every 12 seconds, and the network is open 17 hours a day. In 2017, an average of 243,000 passengers per day used Mi Teleférico.

The first phase of the project was prepared by Bolivia’s Ministry of Public Works, Services and Housing. Phases I and II were designed and constructed by the Austrian-Swiss company, Doppelmayr Garaventa Group² (Doppelmayr), a world-leading ropeway manufacturer, which employed 1,397 full-time workers. The state-owned enterprise (SOE), Mi Teleférico, operates the assets and has 481 full-time employees.

Doppelmayr was directly contracted for the turnkey contract comprising three lines in Phase I, as well as for the four additional lines during Phase II. It provided the technological and technical expertise to build and operate the cable car system, including design, engineering, project management and construction of the stations, ropeway and the cable cars. It also provided capacity building under the philosophy *aprender haciendo*, that is, learning by doing or on the job training, where international experts train and transfer knowledge to Bolivian workers.

Mi Teleférico is one of the few transport projects in Latin America that does not require a grant or government subsidy. In 2018, it reported an operating surplus of USD 5.8 million, demonstrating the financial sustainability of this socially inclusive business model.

This financial sustainability falls under the **Affordability and Optimising Finance** Action Area. The second Action Area covered in this case study, **Private Sector Role and Participation**, is also relevant because technologies from the private sector have been used to enable more inclusive access, as well as to provide environmental benefits. The project is also an example of successful engagement with stakeholders, which falls under the Action Area on **Stakeholder Identification, Engagement and Empowerment**, particularly during the planning phase. In addition, Mi Teleférico was led by the Bolivian Government and political champion, President Evo Morales, which helped to ensure its success (relevant to Action Area 2: Governance and Capacity Building, although not covered in detail in this case study).

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¹ 2018 Guinness Record.
² Please refer to company webpage: https://www.doppelmayr.com/en/the-group/facts-and-figures/
Key Practices Identified and Applied

Statement of the issue in relation to inclusion and brief introduction

The public transport system in La Paz-El Alto was chaotic and polluting. Rapid growth in the number of taxi and mini bus services generated heavier than usual traffic congestion in both cities and the lack of available space to build new transport infrastructure created a vicious cycle of inefficiency and unreliability. Private operators were incentivised to offer a service on routes at times that were profitable for the firms and intentionally failed to provide services on licensed routes, which are commercially less attractive.

Many people live in El Alto and work in La Paz. As the level of private car ownership is low, the majority of commuters relied on public transport to get to work, school, or access vital services. The public transport system consisted of buses and minibuses navigating narrow, winding and congested streets, which increased journey times for passengers and contributed to noise and air pollution. Travel costs were high for most people. Those on lower incomes were the worst affected.

There were no dedicated bus stops, so accessing public transport was challenging for people with impaired mobility, the elderly and pregnant women because they were unable to safely board the buses. Furthermore, there were no dedicated seats on buses to help make their journey easier and no public transport options had enough space for wheelchairs.

In 2012, the President of Bolivia, Evo Morales, put forward plans for an ambitious and unconventional infrastructure project to address the transportation issues in El Alto and La Paz. Bolivia was to build a modern, safe, efficient, sustainable and inclusive cable car system in the metropolitan area. In July of the same year, the President drafted a bill for the construction of the cable car. The bill was approved by the Assembly.

The strong drive for an inclusive society at the national level is reflected in Mi Teleférico, from the way its employees and the travelling public have been treated, to the way people who had traditionally been excluded have now been considered.

AFFORDABILITY AND OPTIMISING FINANCE

How inclusivity has been addressed

The identified practices are a strong and well-defined business case, integration of ancillary revenue, and an optimised fare policy to achieve financial sustainability, affordability, accessibility and inclusivity.

Decree No. 1980, in 2014, created a new state-owned enterprise (SOE) to procure a turnkey project for the design and construction of three cable car lines. The new entity was called Mi Teleférico and it was responsible for the
operation and maintenance of the new asset for the state. It was also tasked with defining the business plan, governance, operation and finance of the project, and ensuring sustainability, accessibility, availability and inclusivity goals were achieved. As an autonomous state-owned enterprise, Mi Teleférico has the authority to self-govern and to implement all of its business decisions. All revenue generated is managed and retained by the company after taxes.

The Central Government was solely responsible for financing the initial investment capital for the construction of the project, including all capital expenditure and the creation of the SOE for the cable cars. The National Treasury of Bolivia provided 100% of the financing for Phase I. Financing for Phase II involved a more complex financial structure, and was provided by the Central Government, with a loan from the Inter-American Development Bank also under consideration.

**Implementation**

**Mi Teleférico Business Strategy Plan 2016-2020**

Mi Teleférico is one of the very few mass transport projects in the world that does not require public subsidies for operations and maintenance. Less than four years after it began operation, it carries a net surplus of USD 5.8 million from an initial investment of USD 234 million\(^3\), delivering a period return of 2.5%.

In 2016, the operator developed a business plan with a clear competitive, financial and market analysis. The objectives, structure and implementation of the new cable car project were clearly defined and justified in its Business Strategy Plan 2016-2020\(^4\). The plan included:

- a legal framework;
- external analysis of the macro-economic environment;
- internal analysis of the national economic and financial environment;
- risk identification and management;
- value proposition;
- market analysis;
- go-to-market plan;
- corporate structure and governance;
- key performance indicators (KPIs) within predetermined timelines;
- financial reporting and analysis; and
- technical feasibility analysis.

### Table 1. Key elements in Mi Teleférico’s business plan

<table>
<thead>
<tr>
<th><strong>Value proposition</strong></th>
<th>• Modern, safe, accessible and inclusive cable car system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market segments</strong></td>
<td>• Vulnerable groups of passengers excluded from existing public transport services</td>
</tr>
<tr>
<td><strong>Business model</strong></td>
<td>• Revenue from fare collection and ancillary businesses • Operating costs are fixed regardless of demand</td>
</tr>
<tr>
<td><strong>Risks</strong></td>
<td>• Identify political, social, currency, legal and business risks and develop guidelines to mitigate them</td>
</tr>
<tr>
<td><strong>Financial governance and analysis</strong></td>
<td>• Corporate financial reporting and audit • Financial analysis requirements • Budgeting and reporting</td>
</tr>
<tr>
<td><strong>KPIs</strong></td>
<td>• Definition of KPIs for service, operations and management, e.g. % availability, % maintenance, % re-investment, % ancillary business</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>• Feasibility and Universal Design to ensure most efficient capital expenditure</td>
</tr>
</tbody>
</table>

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\(^3\) Urban Mobility Solutions: Doppelmayr Cable Car La Paz, (Mi Teleferico, 2018d).

\(^4\) Corporate Strategy Plan 2016-2020, (Mi Teleferico, 2015)
### Fare optimisation policy

The main objective of the project was to provide a modern, clean, safe and accessible public transport system that would serve all members of society. The operator set upfront objectives and guiding principles before design options were generated and assessed. Based on these principles, it was able to set the fare policy to achieve its financial sustainability goals while also reaching its social inclusion objectives.

In a 2015 survey, cable cars represented 2% of the share of transport modes available between El Alto and La Paz. The cable car system is priced higher than the minibuses and microbuses at USD 0.43 (BOB 3, 2017 exchange rate) for a one-way trip. Based on empirical data, passengers travelling on Mi Teleférico reduced their average daily travel time by 22%, representing a net economic benefit of USD 0.58 per person (opportunity costs saved to pursue more work, schooling, services, etc.).

For people with mobility challenges (disabled, the elderly, pregnant women, small children), the cable car system is the only reliable and safe option for travelling between El Alto and La Paz. A concessionary fare is available for passengers with disabilities, the elderly and students at a 50% discount or USD 0.20 (BOB 1.5) per one-way trip. In 2017, Mi Teleférico reported 138 trips per day from 2,186 passengers with disabilities, which represented 5.2% of citizens registered with disabilities in the La Paz metropolitan area.

The correct positioning of Mi Teleférico’s fare policy, which is based on affordability and willingness to pay, contributed to the financial sustainability of the project and unlocked further socioeconomic benefits for all of its users.

### Ancillary revenue

Mi Teleférico offers an array of ancillary services to the public, institutions and firms. In return, it generates a significant portion of its total revenue from the rental of its commercial spaces, advertising platforms, parking etc. The provision of these services supports operation and maintenance costs, diversifies revenue streams and mitigates the commercial risk from changes in ridership. The revenue from these complementary businesses supports the financial sustainability of Mi Teleférico and increases private sector participation and opportunities for small businesses.

#### Revenue by source, 2014-2017 (USD)

![Chart showing revenue by source, 2014-2017 (USD)](chart.png)

- **Fare Collection**
- **Ancillary Revenue**

15% revenue from ancillary businesses 2014-2017

### How inclusivity has been addressed

The identified practice is the use of the private sector’s expertise to introduce new technologies that help to embed inclusivity objectives and train local workers.

Bolivia’s leaders had been planning the cable car system for the cities of El Alto and La Paz since the 1970s. In 2012, Law No. 261 was enacted to authorise the Ministry of Public Works, Services and Housing to procure a specialist cable car provider to implement and deliver a turnkey project for three lines of the cable car system. Doppelmayr Garaventa Group was awarded the contract for this first phase, as well as for four additional lines in Phase II.
Doppelmayr’s role was to provide:

• the technical design, engineering, project management, and construction of the stations and ropeway;
• the fleet of cable cars, and;
• the training of local staff for operations and maintenance.

Doppelmayr provided the technological and technical expertise to build and operate the cable car system based on the unique topography of the cities. It also helped the project meet the required environmental, accessibility and inclusion objectives of the Bolivian Government, such as providing facilities for passengers with disabilities, low-carbon emission technology and safety initiatives.

**Implementation**

Doppelmayr was the sole contractor for the design, engineering, construction and provision of the cable cars. As a turnkey contractor, the private firm was directly contracted to provide all the technology solutions to achieve Mi Teleférico’s objectives.

**Training**

There is a clause in the contract that requires Doppelmayr to train local Bolivians in all technical aspects of the project. The contractor provided capacity building under the philosophy *aprender haciendo*, that is, learning by doing or on the job training, where international experts provide advice, train, and transfer knowledge to Bolivian workers in relation to technical assistance, engineering, design, operations and maintenance.

**Universal Design**

The project uses Universal Design standards to help ensure facilities are accessible to all users. The stations have ramps, elevators and tactile paving to help disabled passengers.

**Smart mobility technology**

Smart mobility technology, both software and hardware, has been incorporated into the design of the stations, such as the proprietary Passenger Information Systems for announcements, mobile apps, smartcard tickets, public address systems, telecommunication network coverage (including WiFi), fire alarm systems, biometric controls, electronic access gates, ‘smart point’ top-up machines, fibre optics, radio communication systems, internet and CCTV systems.

**Energy efficiency technology**

To improve energy efficiency solar PV panels have been installed on every cable car. They supply the electricity for the internet connections, lighting and communication systems. In the stations, LED lighting has been specified to reduce 49% of electricity consumption.

Mi Teleférico is 100% electric. Most of its power requirements are supplied by hydroelectric power plants in El Alto.

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**Figure 4. Elderly passenger assisted by station attendant**


**STAKEHOLDER IDENTIFICATION, ENGAGEMENT AND EMPOWERMENT**

**How inclusivity has been addressed**

The identified practice is early and extensive public stakeholder engagement during the design and operations phases of the project.

Stakeholder engagement has helped authorities to win the support of people living near the cable car route and, in particular, identify where towers and stations would be located. They used meetings and fairs to engage with people throughout the design and construction phases and communicate the key benefits of the project.

The 2014-2018 Mi Teleférico Report states that:

• between 2015 and 2018, there were more than 800 meetings with residents, social organisations and authorities with 4,948 attendees;
• 160 meetings were held with local groups, attracting 14,891 attendees;
• 188,697 people participated in 302 fairs; and
• more than 50 school groups visited the facilities to learn more about the project.

Prior to the start of work on Phase II, more than 20,000 citizens were consulted during a series of public events.
**Implementation**

**Focus groups and workshops with vulnerable community members**

During the design stage of the project, focus groups and workshops were held with people with disabilities and the elderly to ensure their needs were understood and taken into consideration. The focus group meetings were arranged by the Vice Ministry of Transport and were invitation-only events. In the interview with Mr. Cesar Dockweiler, the CEO of Mi Teleférico, he stated that although the draft project met most of the requirements identified by the groups, people's feedback was useful in planning for the operation of the system.

Through their engagement with the community, operators also helped to explain to people how the cable car system would work, as it required a major cultural shift. People would now need to use transport stops and show patience while waiting in queues to create order, discipline and shared values.

**Creation of a website to educate users**

A website was set up for users. It provided information on the system and how to use it, as well as information on the mission and values of Mi Teleférico and relevant legislation. The site also includes links to forms for complaints and shares operational details. In 2018, a mobile phone application was launched to create an even stronger connection with users.

**Capacity building and training for vulnerable groups**

During operations, capacity building and training has also been undertaken to help vulnerable groups and job seekers to gain employment, and to ensure that people working in the system are trained to assist people with specific needs. For example, in 2016, 59 different types of capacity building activities were completed. They included the maintenance of electrical equipment, first aid, evacuation procedures, fire prevention, Constitutional rights, construction, and technical training. Between January 2017 and March 2018, 136 employees were trained to assist people with disabilities. Training is also provided to help people with disabilities in the workforce. Employment opportunities are provided to people with disabilities and women in Mi Teleférico, who currently represent 4% and 36% of the workforce respectively.

A program titled *Trabajo con Altura* (which translates to "Working with high values") aims to benefit young people who are looking to obtain work experience, and is aimed at public servants and users of Mi Teleférico. Between 2014 and 2018, 886 young people graduated from this program. Additionally, about 30 students have completed internships in the operations, maintenance and finance departments, as well as the project management unit of Mi Teleférico.

**Supervision and monitoring**

During the design phase, information on KPIs was collected as a baseline. The number of indicators has since been expanded.

During the operations phase, monitoring is undertaken and reported annually in relation to the service level (e.g. the quality of the service, number of users, punctuality, perception of the service, and complaints), and number of users (including disaggregation of those with preferential tickets – people with disabilities, students and the elderly). This is recorded in yearly reports (2015, 2016 and 2017), which are published on issuu.com. A report was also issued in March 2018, covering the period May 2014 to March 2018.

A socioeconomic survey is planned in 2020 to understand the impact on people who live closer to stations, people who regularly use Mi Teleférico, and people who cannot enjoy the benefits of the service. It is intended to establish:

- how has life changed for people with access to Mi Teleférico; and
- how has life changed for people without access to Mi Teleférico.

The operator will compare areas with and without access to be able to analyse the impacts of the cable car system.

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* Refer to Mi Teleférico website: [http://www.miteleferico.bo/](http://www.miteleferico.bo/)

* 2017-2018 Management Report, (Mi Teleférico, 2018b)
Benefits Realisation

<table>
<thead>
<tr>
<th>Identified benefit</th>
<th>Benefit description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social equity and social stability</td>
<td>2,186 people with disabilities in the cities of El Alto and La Paz benefit from the system – this is 5.2% of the disabled population of 41,827 people living in the area. They have undertaken more than 193,000 journeys, with an average of 138 journeys made per day.</td>
</tr>
<tr>
<td></td>
<td>68,761 students with preferential cards have taken approximately 8.6 million journeys.</td>
</tr>
<tr>
<td></td>
<td>36,193 elderly people with preferential cards have made 3.5 million journeys.</td>
</tr>
<tr>
<td></td>
<td>It was reported that between 29 May 2014 and 31 March 2018:</td>
</tr>
<tr>
<td></td>
<td>• if a person took 30 trips on the red line per month, they would have saved 16 hours in travel time;</td>
</tr>
<tr>
<td></td>
<td>• if someone took 30 trips on the yellow line per month, they would have saved 17 hours in travel time;</td>
</tr>
<tr>
<td></td>
<td>• if a user of the blue line took 30 trips each month, they would have saved four hours in travel time; and</td>
</tr>
<tr>
<td></td>
<td>• 30 trips on the orange line per month would have saved people eight hours in travel time.</td>
</tr>
<tr>
<td></td>
<td>They could have spent more time on leisure activities, with their families, working more productively or improving their health.</td>
</tr>
<tr>
<td>Increasing gender equity</td>
<td>Between May 2014 and March 2018, 36% of employees were women (225 out of 633 people).</td>
</tr>
<tr>
<td></td>
<td>In 2017, Mi Teleférico opened the Mi Dulce Cabinita (my sweet little cable car) crèche for the children of staff members.</td>
</tr>
<tr>
<td>Increasing affordability and accessibility</td>
<td>The ticket price balances the need to ensure the project is economically viable with the desire to improve accessibility for the most vulnerable groups in society. The project does not need any subsidies from the state and is therefore a model for other developments.</td>
</tr>
<tr>
<td></td>
<td>Preferential tariffs (a 50% reduction) are available for people with disabilities, the elderly and students. The Mi Teleférico 2014-2018 Report states that people with disabilities have been able to save more than USD 42,130 (290,388 Bolivianos) during their 193,592 journeys.</td>
</tr>
<tr>
<td>Job creation and equal access to labour market opportunity</td>
<td>Between May 2014 and March 2018, 36% of employees were women (225 out of 633 employees).</td>
</tr>
<tr>
<td></td>
<td>People with a disability make up 4% of the workforce.</td>
</tr>
<tr>
<td>Technical literacy and knowledge sharing</td>
<td>The project has drawn on the experience of teams from around the world. Contractors are required to train Bolivians in all areas of operation, management and maintenance. 551 employees have participated in training since 2014.</td>
</tr>
</tbody>
</table>
**Stakeholders**

<table>
<thead>
<tr>
<th>Key beneficiaries</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>People with disability/impaired mobility</td>
<td>Target group for the project to ensure equity of access. Equity requirements for this group addressed in design and operation.</td>
</tr>
<tr>
<td>Women</td>
<td>Targets for employment - currently 36% of the workforce are women. Events to address women’s safety.</td>
</tr>
<tr>
<td>Low-income areas</td>
<td>Connection of the lower income area of El Alto to La Paz.</td>
</tr>
<tr>
<td>All users and employees</td>
<td>Collective empathy toward vulnerable groups. Targeted media and education campaigns.</td>
</tr>
</tbody>
</table>

**Institutional stakeholders and partners**

<table>
<thead>
<tr>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Public Works, Services and Housing</td>
</tr>
<tr>
<td>Doppelmayr Garaventa Group</td>
</tr>
<tr>
<td>Mi Teleférico</td>
</tr>
<tr>
<td>InterAmerican Development Bank</td>
</tr>
</tbody>
</table>

**Lessons Learned**

**Success factors**

**Political support** was crucial. The President of Bolivia demonstrated his support for Mi Teleférico, which was essential to push the project forward. The philosophy of President Morales is to promote social inclusion for all, and this is reflected in efforts to improve access to low-income areas, and mobility for disabled persons and the elderly.

**Building local capacity** was set out in the project’s contracts. Mi Teleférico’s operators insisted that technology and knowledge should be transferred to local people.

**Social inclusion** is the philosophy of President Morales and was incorporated into the project mission, which specifically addresses accessibility and mobility for disabled persons and the elderly. People were at the heart of this project.

**Key challenges**

**Introducing the project into two cities that had no integrated transport system** was a challenge. La Paz and El Alto did not have an integrated transport system prior to Mi Teleférico. Therefore, challenges included teaching people to use dedicated transport stops and travel cards, and queueing procedures. The project included education programs to help address this gap in knowledge.

**Addressing workers’ attitudes to people with disabilities** was a further key challenge. Workers had to be trained to assist people with special requirements. The project also sought to include people with disabilities or impaired mobility in the operation of the cable car. Encouraging the wider workforce to treat everyone as equals continues to be an ongoing learning experience.
References


Figure 5. President Evo Morales greets construction workers, Source: Mi Teleférico (https://issuu.com/miteleferico/docs/memoria-2017-2018)


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**Interviews**

Interview with Esther Ruto (18 June 2018), General Manager Technical Services with Rural Electrification Authority, Last Mile Connectivity Program. (A. Keller, Interviewer)