

## **The railway heritage in Mexico and its role in the configuration of industrial and cultural landscapes.**

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### **Abstract**

The construction of the railways in Mexico was an event of national importance, not only for its role in the economic history, but for their contribution in shaping cultural landscapes of industrial character. The railway system made many cultural exchanges possible in various regions, setting an important natural, social and cultural environment. In recent years most of the vast industrial railway heritage has become obsolete and unused, and has suffered rapid and alarming deterioration. Jalisco is located in the west of the country and has the largest lake in Mexico. Two trunk railway lines and many branches communicating the haciendas and towns passed through the region. Some of these routes have been abandoned.

The projects, “*Vía verde del Mariachi*” and “*Vía verde de Chapala*” seek to recognize the importance of the cultural industrial landscapes created by the railroad in this part of México. Aims to recover the memory of the railway routes and the design of a network of more than 200 kilometers of non motorized routes along 11 municipalities have included projects to rescue and conserve the tangible and intangible heritage of these regions. These constitute integral conservation projects focused on recognizing the value of the natural, cultural and industrial landscapes linked to the railway history in Mexico.

**Keywords:** *railways, cultural industrial landscapes, greenways, heritage, cultural routes, regional development*

## 1. A brief history of the railroad in Mexico

The first grant for the establishment of the railroad in Mexico is given in 1837 and with it begins the long process of the construction and consolidation of this transport in the country. Thus gradually opening trunk lines and branches which contribute over the years to detonate the political, economic and social development of the regions where they passed. The railway system became one of the most important means of transportation in Mexico and the railway drastically changed the country's economic situation and especially of those regions they crossed, as they integrated isolated areas into the national economy. It also facilitated the circulation of people and goods and allowed new markets for local products to open as they shortened distances allowing them a faster crossing. The importance and impact of the railroad cannot be understood without taking into account the close links with the haciendas in the rural areas. The haciendas were productive units that are considered an architectural phenomenon, with an economic, social and ideological impact, which involved a multiplicity of circumstances and relationships that contributed to their development, peak and decline. In Mexico we would not be able to understand the importance of the haciendas and their production, without considering the fundamental role of the railway offering the possibility of transporting their goods to the markets and distant cities.

Thus, for the haciendas, the railroad creates greater inter-regional trade, mainly due to the speed of the transportation of goods and the communication between haciendas and other places, thereby giving greater access of products and services to towns and cities to which previously they had no access. Also, during the peak of this system, the railway stations played a key role, as they became centers of social gatherings, meeting places between communities, a gateway to news from other places, through the mail, the telegraph and visitors. They were therefore, the meeting point for people from various parts of the country who represented, in turn, the focal points of interchange in regional trade, as well as the access to different regions.

Of the entire rail network that was built in the country in the late nineteenth century and part of the twentieth century, the state of Jalisco, in central Mexico, has 665 Km. of railways, of which there are three trunk lines and three branches (Secretaría de Comunicaciones y transportes. 1995. p. 194). or supplying pathways, that comprise the short lines and which branch off from the above. (CONACULTA, 2005)

In 1994, the process of the restructuring and privatization of the railway system begins. This takes place through the reform of article 28 of the Political Constitution of the United Mexican States whose objective was the transformation of the national railway system, with the intention of having an efficient, reliable, secure, competitive and above all profitable

rail system. From this moment on, the Mexican rail system is opened to private investment through concessions and a regime of permits, and passenger transport by rail is progressively limited to the point of completely disappearing.

When the passenger service is suspended, the railway stations, which have a particular architectural value, because of their constructive typologies, begin to gradually be used only as warehouses and points for the exchange of goods along the routes. With this, the abandonment of these buildings begins. Consequently, this situation causes the accelerated deterioration of the stations across the country and changes the economic and social dynamics in many regions, significantly changing their role as the centers and nodes of activity and exchange of goods and products between the towns and regions. Based on this, the projects *Vía Verde del Mariachi* and *Vía Verde de Chapala*, seek the recovery and enhancement of the territory and its comprehension as part of a system that based on the arrival of the railroad, form the industrial, cultural and natural landscape in vast regions of Mexico. As part of their study subjects and with an integrated view of all, for their recovery and valorization, the projects presented in this article, always take into consideration the close link of the rail system with the various communities where the train passed. Also, the link with the production units, such as; ranches and farms that were in the rural area, in addition to the old systems of navigation in the lake area and the Santiago River, today nonexistent. All this without losing sight of the binding element among them that was undoubtedly the railroad, which played a key role in shaping the rural space between the nineteenth and twentieth centuries and which largely has determined the industrial cultural landscape today in many regions of our country.

## **2. Criteria for the conservation of the railway heritage and its cultural landscape.**

One of the criteria underlying the Greenways projects, has to do with the intention that they fulfill a target with a social function in addition to preserving the symbolic and significant part of the territory and its components. We agree with the idea that cultural heritage and integrated conservation in the various cultural landscapes must play a definite role in the economic productivity of the communities or regions, generating resources or benefits that enable the development and improvement of the quality of life of its citizens, providing employment opportunities and at the same time what is necessary for the maintenance and enhancement of those cultural heritage resources. (Chico Ponce de León, 1995, p. 36)

Cultural heritage is undoubtedly one of the key elements that determine the identity of people, because in addition to covering the economic, functional and environmental needs, society also has cultural, ideological or psychological needs which can be satisfied by preserving or spreading cultural heritage. When this heritage has a defined role in the economic productivity of a community, it can generate resources (or benefits) that

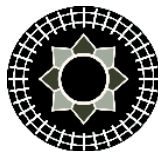
contribute to the development and improvement of the quality of life of its citizens, providing employment opportunities and at the same time what is necessary to maintain and enhance those cultural heritage resources. (Chico Ponce de León, 1995, p. 36)

The Industrial heritage consists of the remains of the industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education. (ICOMOS. 2003).

From this standpoint and with the aim of preserving the cultural landscape in an integrated manner including the cultural, natural, industrial, tangible and intangible heritage, the projects presented in this article are seeking the recovery of the abovementioned, as well as to contribute to improving the quality of life of the communities in which they exist, encouraging the re-appropriation of the territory, the resignification of it and therefore help strengthen the sense of local identity.

### **3. Conservation projects of industrial cultural landscapes. The “Vía Verde del Mariachi” and the “Vía Verde de Chapala”.**

Since 2010, the ITESO, Jesuit University of Guadalajara, has developed two recovery projects of abandoned rail routes as an element of the industrial heritage and as a linchpin of the new dynamics of the integrated conservation of the territory and its heritage and the cultural landscape in Jalisco. These projects named "Greenways" promote a broad view of integrated landscape conservation, the concept of greenways covers all aspects of ecology, flora, fauna, geology and landscape. It also includes architectural, archaeological heritage, industrial heritage including rail and nautical elements, in addition to cultural aspects such as; history, folklore, customs, traditions and names of places. (Asociación Europea de vías verdes, 2000, p. 13)



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As a reference for these projects, the examples and good practices of other greenways projects, which are common in European countries mainly in Spain, but which in Mexico are barely developed. Alongwith the projects presented in this article, we seek and promote the recovery of the heritage and enhancement of the industrial cultural landscape, social

development, touristic opportunities and the economic development of regions where there are roads and railway heritage, and a clear understanding of the sites and their preservation.

The added value of the projects, *Vía Verde del Mariachi* and *Vía Verde de Chapala*, is that in addition to the non motorized mobility projects for the recovery of the abandoned railway routes as a pretext for the enhancement of the landscape, we seek the understanding of the territory and its landscape in a broader sense and more integrated manner with the different elements that compose it. The projects aim, among other things, to the conservation of nearby urban contexts, integrating both relevant cultural and natural sites, focusing on the recovery of traditional elements, activities and dynamics of each place, also for the recovery of local and regional traditions and customs, as well as the promotion of new territorial dynamics for the valorization of the site with an overall view. These two projects of greenways consider linking railway routes or pathways as the main articulator of the territory, as it was when the railroad worked on a regular basis.

For the development of the project, three main categories are integrated of articulated paths: a) the first of the "greenways", which are those that rigorously recover the old or disused railway lines, b) the "blue routes" which are those paths that develop along waterways such as rivers, streams, canals, lakes, etc., and c) the connecting roads branching out of greenways or blue routes and are those that allow to link or relate the territory and nearby sites as part of an interconnected network. These connecting routes allow the territorial connection linking haciendas, urban complexes, dams and water bodies, old rural facilities, among many other sites.

Therefore the projects for the recovery of the industrial cultural landscape presented here, take as its main objective the recovery of rail routes and the landscape associated with it and also integrates the sites that were benefited or were linked to the railway routes when it worked regularly. All this landscape resulting from the industrial activity from the railroad is what shapes the cultural landscape we have today, and in an integrated manner is what we seek to preserve and to value, as an important vestige of a significant period in the economic life of our country.



Figure 1: Location of greenway projects

The Master Plan *Vía Verde del Mariachi*<sup>1</sup> seeks to recover the memory of the old railroad route whose aim was to reach the port of Chamela in the Pacific Ocean. The construction began in 1917 completing only a stretch of 31 km., which partially ran for a period of about 10 years, between 1928 and 1929 the service was canceled and then the track dismantled. The original route is composed of roads and trails and crosses plots of land in 4 communal regions, involving three municipalities of the State of Jalisco, located to the west of the Metropolitan Area of Guadalajara. (See figure 1)

The name, "*Vía Verde del Mariachi*" seeks to show the essence of the region, considering that one of the places of origin and destination of the greenway is the city of Cocula, Jalisco. This city was declared as "World birthplace of the Mariachi" on September 6, 2009. In November 2011, the Mariachi was enrolled on the Representative List of Intangible Heritage of Humanity by UNESCO, with the name, "*Mariachi, string music, song and trumpet*".

This project involves the holistically development of several specific projects for landscape conservation. With the rail route as articulator, diverse geographic and topographic surveys were made for the recovery and upgrading of paths where the railroad originally passed and included the design of 3 bridges to ensure continuity in the 32 kilometers of the route.

<sup>1</sup> See the website: <http://viaverdemariachi-masterplan.weebly.com>

In addition, several projects were developed, among others, of conservation and the improvement of the urban image in communities near the route to preserve their identity and characteristic typology. Several studies and projects were carried out for the conservation of the architectural heritage that included the restoration and conservation of the railway station of Santa Ana, the restoration of the Aqueduct of the El Verde dam, the restoration and adaptation of a hacienda as a hotel and the restoration of the old railway station of Cocula, among other projects. All these studies are complemented by a detailed environmental study and the integration of a plan of reforestation and conservation of the natural environment with a catalog of proposed species. In order to make decisions in the planning process of the project, a market study was conducted to identify relevant data of the inhabitants of the region, based on this; important decisions that determined the characteristics of the project were taken. Also, this recovery project of the industrial heritage and its landscape is presented as a comprehensive project and primarily as a cultural product, which will help to promote cultural tourism. Because of this, it was designed as a fundamental part of the project, a portfolio of graphic identity to show and position it as a cultural tourism product, which is intended to preserve and promote the industrial cultural landscape, but taking advantage of this as an element generating resources and benefits for the region. For the proper management of the site, it was essential to integrate a study on the ownership of the land along the route that was to be recovered, to identify the owners of each parcel, in the lands where the railway originally passed, with information from the National Agrarian Registry. This information and joint studies and projects, enabled the design of the management plan of the route, to ensure its proper operation, maintenance and management.

In 2012 this project was awarded the National Award by the National Institute of Anthropology and History as "The best strategic project of planning and management of cultural heritage " in Mexico that year.

From this experience, the second project developed is the Master Plan, Vía Verde de Chapala<sup>2</sup>, in which the first stage is the recovery of the historical memory of the railroad route to Chapala, nonexistent today. Also, the project is developed linking various connection routes to the Metropolitan Area of Guadalajara, capital of Jalisco, and also connecting various municipalities by diverse paths in the region where the largest lake in Mexico exists. This route is relevant because in the early twentieth century Chapala was destination on more than one occasion, of then President Porfirio Diaz who traveled from vacation to this place. (Cosío Villegas, 1998, p. 980)

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<sup>2</sup>See the website: <http://viaverdechapala.weebly.com>

The railway was built thanks to the initiative of the Norwegian Paul Christian Schjetnan, who arrives in 1908 and marveling at the natural attractions of Lake Chapala, the largest in Mexico, he decided to stay and spend there the rest of his life. He becomes one of the main promoters of Chapala, and responsible, among other things, to develop, build and manage the railway which runs from 1917 to 1926 approximately.

The "*Vía Verde de Chapala*" project, aims to recover the original railroad route that was dismantled several decades ago, and intends to apply the same criteria for the intervention and development that was used in the "*Vía Verde del Mariachi*" project, but in this case involving the creation of three non-motorized communication paths which are: a) the "greenway" that recovers the original line of railroad of 26 km., b) the "blue route", which follow the borders of the river Santiago passing by four abandoned railway stations in an approximate length of 59 km., c) the bike path on the riverbank, which borders lake Chapala to achieve connectivity of the route to the railway station in Chapala, with an approximate distance of 34 km. to one end of the greenway, and d) connecting routes arising from the abovementioned routes and linking with other existing bikeways, with the various haciendas, urban complexes and sites of cultural and natural value of the region. In addition to the above, the project included the realization of diverse studies and specific projects for road engineering, including among others, records and calculation of routes, path analysis and conflicting crosses, and the characterization of soils through studies of soil mechanics to develop proposals for trails and the materials for these, among others. In addition, the context was enhanced by developing conservation projects for the urban image of the towns, including various architectural intervention projects in buildings as former haciendas, railway stations, ruined temples, etc. additionally some projects for the adaptation of docks on Lake Chapala that are underused and in poor condition, which link the lake to nearby islands. In some of the sites, cultural management proposals for the promotion of cultural activities and recognition of intangible values of the site were also developed. This is the overall vision that we propose for the full recovery of all these elements that make up the site and its landscape throughout the country where there is industrial heritage such as abandoned railway stations. At the same time, some other proposals of other cultural routes within the route of the "greenway Chapala" were also developed. Thus, the identification of a specific route to see the existing religious architectural heritage throughout this landscape, which includes a route of Franciscan temples and various religious sites that exist in the region. A proposal for a route to visit natural attractions such as waterfalls, rivers, streams and sites important vestiges of petroglyphs and rock formations existing in the region was developed. Complementing the above routes, the parties and traditional celebrations at sites along the route have been registered and identified, which allows us to know the different intangible aspects of the territory that are taken in consideration for the design of the Management Plan accompanying this study.



## Summary

With the projects presented in this article, we seek to achieve the goal of raising awareness in the recovery and valorization of industrial and cultural landscapes and territory, in this case structured from the railway lines. We emphasize how this industrial element contributes to the configuration of cultural routes and itineraries, and taking advantage of its landscape to link towns and municipalities, and the consideration within its area of influence, the value of the various cultural and natural elements existing in it to promote its preservation

In addition to the above, it facilitates the development of local training programs with an active and participatory pedagogical scheme, which promote the economic characteristics of the region, and that should work in collaboration with the agencies linked to economic and social development. This is done through a series of activities focused on training and job-training programs to benefit the local population, with emphasis on the most vulnerable sectors, such as youth, women, the disabled, and the elderly population.

These projects besides adding value to the land and preserve the heritage and landscape, are opportunities of new labor markets that offer economic returns to its inhabitants, generating direct and indirect employment and entrepreneurship of family businesses linked to the Greenways, as well as improving the environment in municipalities involved in these routes.

This is a great opportunity and challenge to guide and facilitate the generation of companies related to greenways, whether to provide services and sale of local products such as restaurants, hotels, craft shops, small shops and businesses active tourism or as a generator of either permanent or temporary jobs or for specific activities or for the maintenance and improvement of infrastructure. These projects can stimulate the influx of visitors from neighboring municipalities and the metropolitan area of Guadalajara, as well as domestic and foreign visitors and can encourage economic development in the region.

In addition to the added socioeconomic benefits, the transmission of cultural and environmental values through sustainable forms of transport, will contribute to healthy habits for the better physical and mental health of the population, while the non-motorized mobility in the region will be promoted with universal accessibility. Finally, and as an extraordinary resource for these projects, the regions where the Greenways of Jalisco have been planned have extraordinary climate year round ideal for outdoor activities. For all the above, there are countless benefits generated with these recovery projects and valorization of these industrial cultural landscapes in Jalisco. Such initiatives are a pending issue for the rest of the states of Mexico.

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