Indian Institute of Technology Mandi, India 175005

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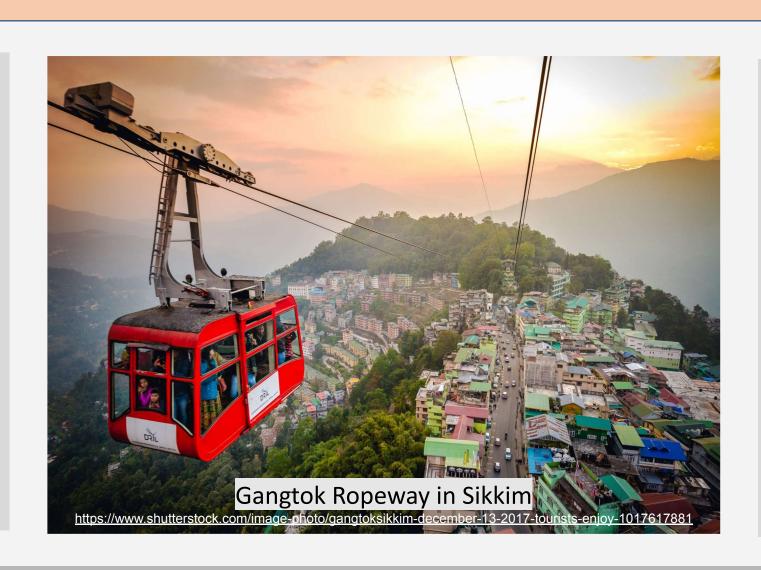
Aerial Ropeway Transportation (ART) Systems

Mentor(s): Dr. Alex Sphar (WPI), Dr. Uma Kumar (WPI), Dr. Rajeev Kumar (IIT)

Atharva Ayanar, Daniel Jarvis, Joseph Nixon, Ronak Pamnani, Atharva Raut, Zabelle Simmons, Jasnoor Tiwana, Owen Weber

 Rapidly urbanizing communities need adequate transportation

- The hilly terrain of Himachal Pradesh makes expanding upon existing infrastructure problematic
- Are ART systems an efficient and effective solution?
- Parvatmala Project (₹1,250 Billion) for ropeway projects



WHAT ARE AERIAL ROPEWAY TRANSPORTATION (ART) SYSTEMS?

- A suspended rope or cable to move people or goods
- Transportation with excellent ability to traverse difficult terrain

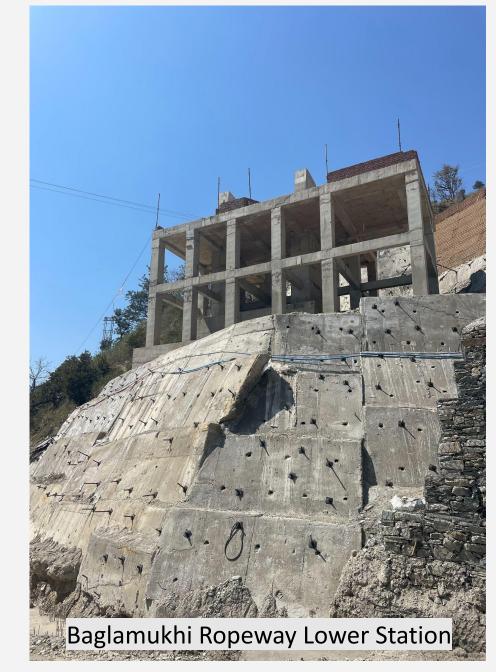
Assess Current and Predict Future
Traffic & Transportation
Problems

Investigate Tourism Expansion in Himachal Pradesh

Assess Potential Impacts of ARTS Implementation









Smart City Initiative

Police Department

RTDC

Proposed ARTS

Existing ARTS

OBJECTIVES

Tourism

Most of the Mandi Town traffic consists of tourists traveling through Mandi to other locations, like Manali.

Private Vehicle Ownership

Private vehicle ownership has increased and will continue to increase although, there are no plans for additional parking.

Rapid Urbanization

As many cities rapidly urbanized, city planning was not the largest priority and now cities suffer from narrow roads with little room to expand due to mountainous terrain and the built environment.

Ropeways

An ART can be used by government to monumentalize the

power and capability of the region

Religious Tourism

With a majority of domestic tourism being tied to religious sites, transportation to such sites has been a primary focus of Federal and State Governments

India on the Global Stage

Attention is brought to cities with impressive infrastructure and significant development. The proposed 15 km Ropeway in Shimla can bring that interest and attention to the location.

Traffic

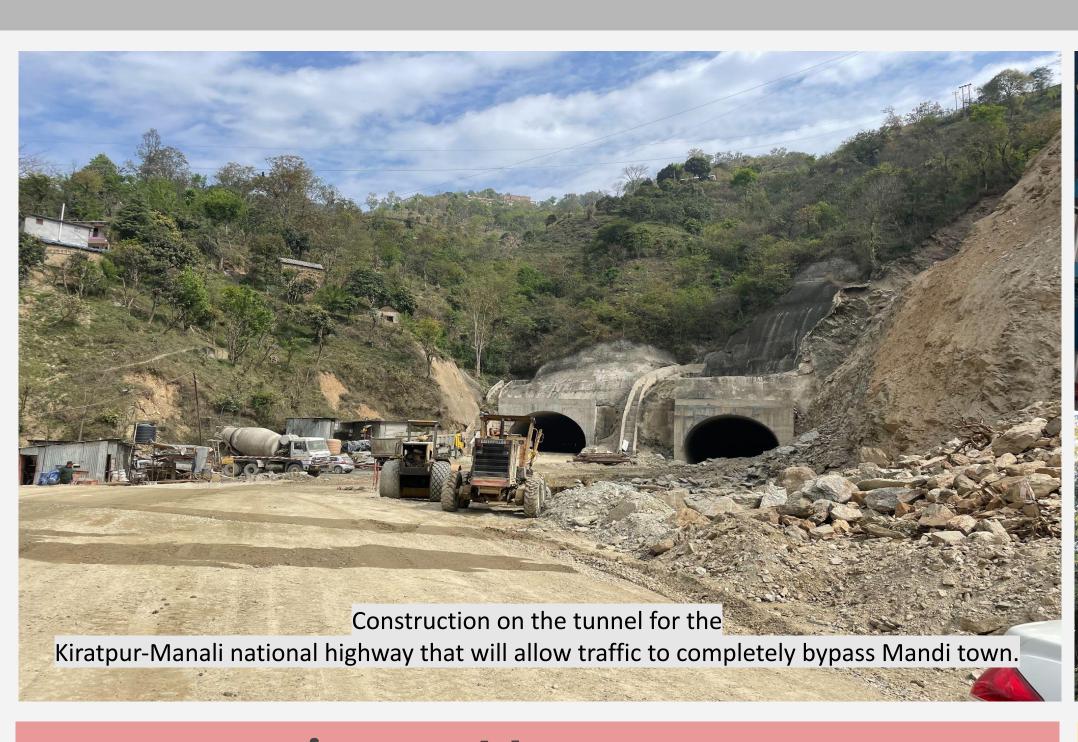
The main benefit of every ropeway researched has been to alleviate traffic congestion and make a location more accessible.

New Infrastructure

Ropeways allow for new economic hubs to be fostered at loading stations. Along the shimla 15km ropeway 700+ jobs are anticipated to be created directly and indirectly.

Existing Infrastructure Decline

With the ropeway installation taxi, rickshaw and bus usage is anticipated to decrease.



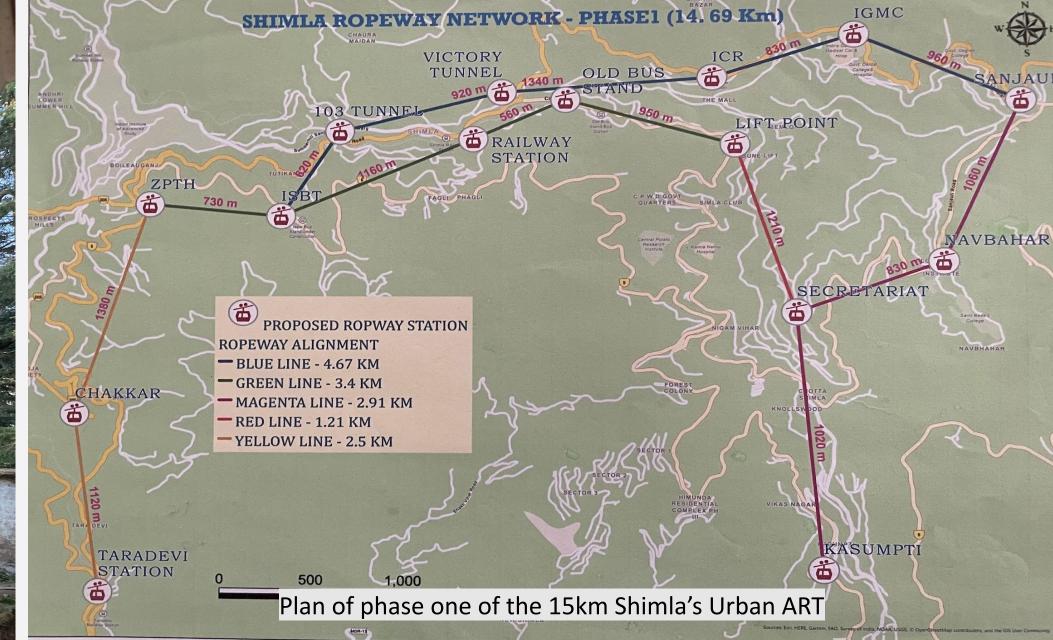
Transportation Problems

Large scale solutions and projects are necessary to keep up with Indias rapid urbanization in cities. The majority of projects will have pushback but without progress, cities will be inundated with traffic sooner or later.



Tourism Increase

Domestic Tourism in India is intrinsically tied to religion and ropeways transporting people to temples can cause an increase in visitors. Ropeways bring attention to a location increasing tourism.



ARTS Impacts

Ropeways have many benefits and few drawbacks when implemented in appropriate environments.

They may be imperative in improving transportation across Himachal Pradesh.

ART SYSTEM CONSIDERATIONS

Support Increased Traffic

Adapt to Existing Infrastructure & Environment

Ability to Support Increased Tourism

Funding

Community Support

RECOMMENDATIONS

• Increasing ARTS legislation to continue to guarantee ARTS success

• Investment in communities that will be urbanized in the coming years by acquiring/setting aside land for urban infrastructure now