

# Leaders Program in Urban Transport Planning and Management- 7

## EFFICIENT TRAFFIC AND DEMAND MANAGEMENT OF MANALI

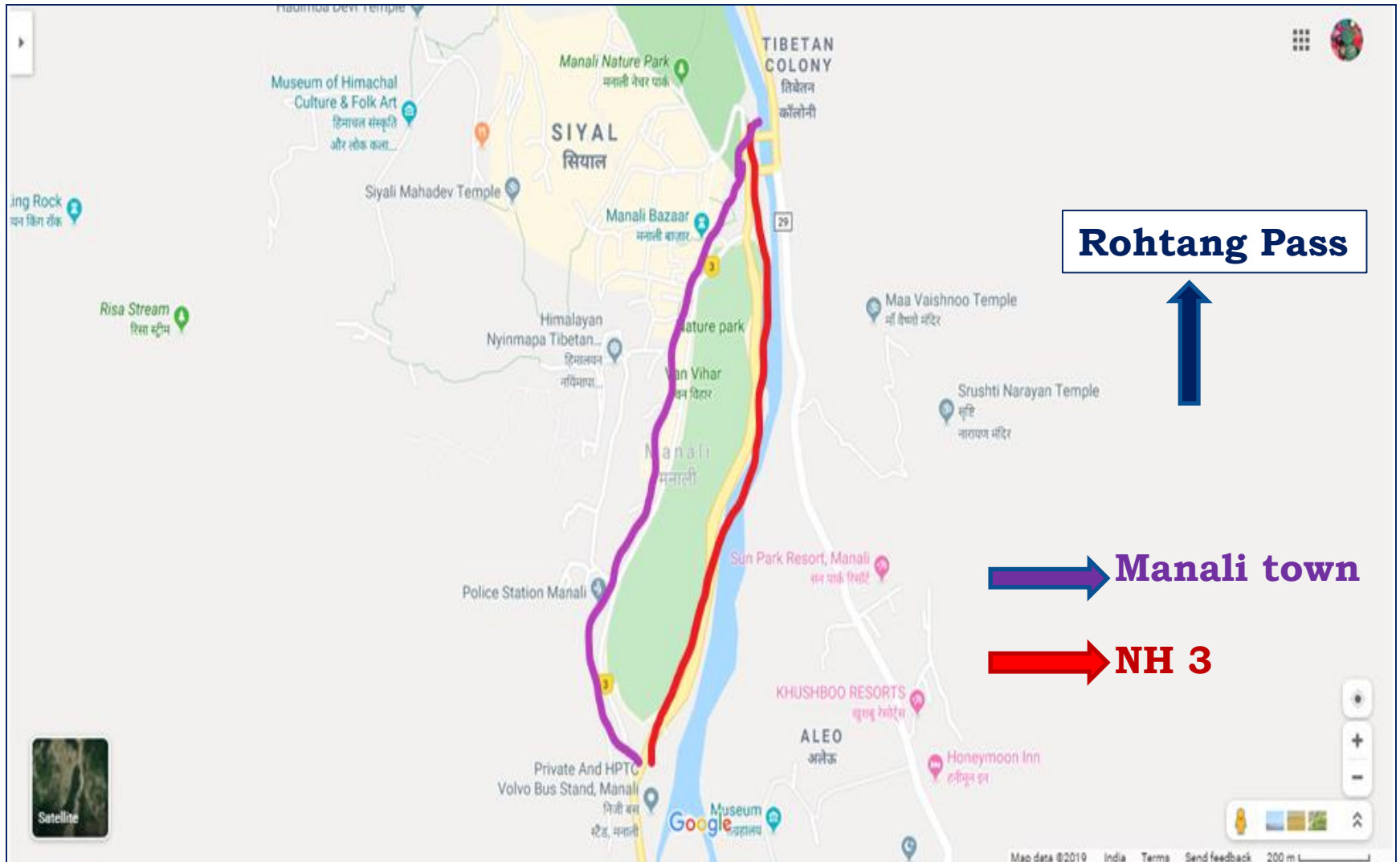


**SHALINI AGNIHOTRI**  
**HP POLICE**

# MANALI - WOES

- ❑ 30-40 lacs visitors/year
- ❑ 5000 hotels/guest houses/stays – legal/illegal
- ❑ 3500 local taxis –6000 in peak season
- ❑ 120 Volvos – 300/day in peak season
- ❑ 5-8 hrs standstill –upto 12 hrs in peak season
- ❑ 6-7 km NH 21- upto 20 km in peak season
- ❑ Ecological damage
- ❑ Policing challenges

# PROJECT AREA





# **PROBLEMS - DIAGNOSED**

- ❑ Uncontrolled/unregulated traffic plan
- ❑ Lack of infrastructure – parking places, halt stations and shuttles
- ❑ Under-utilized available PT and local MOTs
- ❑ Over pricing and service issues

# What do we have at hand?

## STRENGTHS

1. Sufficient local modes of transport
2. Widening of NH
3. Local support

## WEAKNESSES

1. Ill-planned construction-growth
2. Old roads–no widening
3. Rains, snowfall-damage

## OPPORTUNITIES

1. Unutilised land mass – create parking
2. Unexplored shuttles
3. Controlled, regulated use of available MOTs

## THREATS

1. Continuous growth - vehicles on road
2. Encroachment, lack of enforcement
3. Environmental, sustainability issues

# PROJECT NEED

- New traffic plan - all traffic bottlenecks and implementable solutions
- Integrated and regulated in a sustainable and economically viable way – local MOTs
- Command and Control Centre - better enforcement and unified command.
- Capacity building and training

# PROJECT AIM

- Tinker with available resources and regulate them
- Improve existing infrastructure
- Better traffic management and policing
- Sustainability – tourism and ecology



# IDENTIFIED STAKEHOLDERS

- Police
- Municipal Corporation
- Local Administration
- Taxi/Auto/Bus Associations
- Hotel Associations
- HRTC
- Department of Transport

# DATA ANALYSIS

- Approximate vehicle in and out of Manali in peak tourist season – 5,200 per day
- Average trip frequency – 3.7
- Average trip length – 5.2 km
- Alternate site for parking, transit.
- Command and Control Centre – established

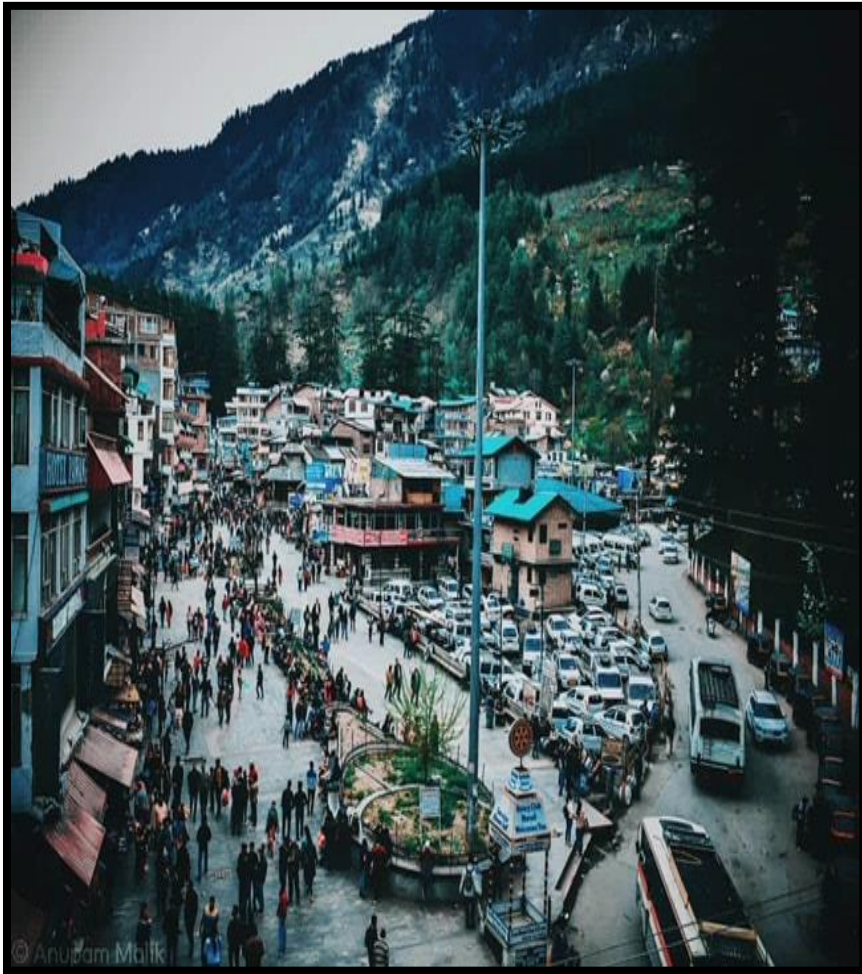
# PROPOSED PLAN

- Large parking space outside the town –Rangri -
- No tourist vehicle inside the town – one way plan
- Parking charges - develop amenities, expand parking
- Integrate rotationally local MOTs - alternative conveyance - within and outside Manali.
- Regulation – DoT, HRTC, local administration
- Command and Control Centre at Manali

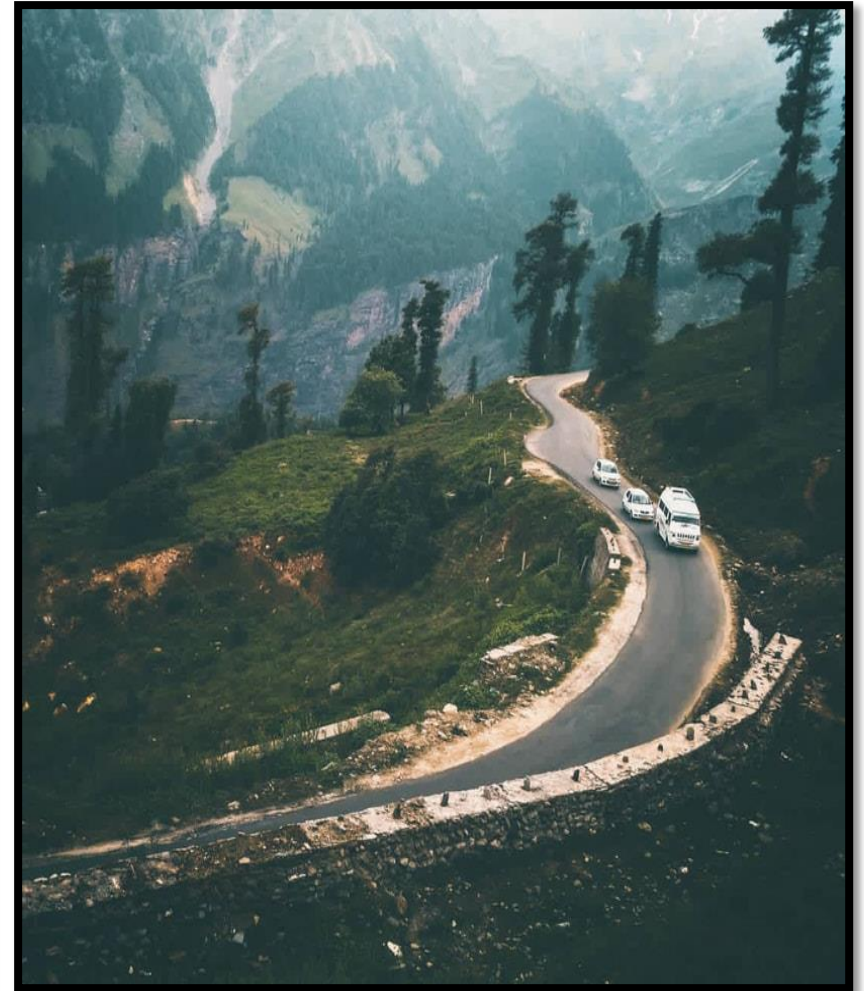
# ONE WAY PLAN

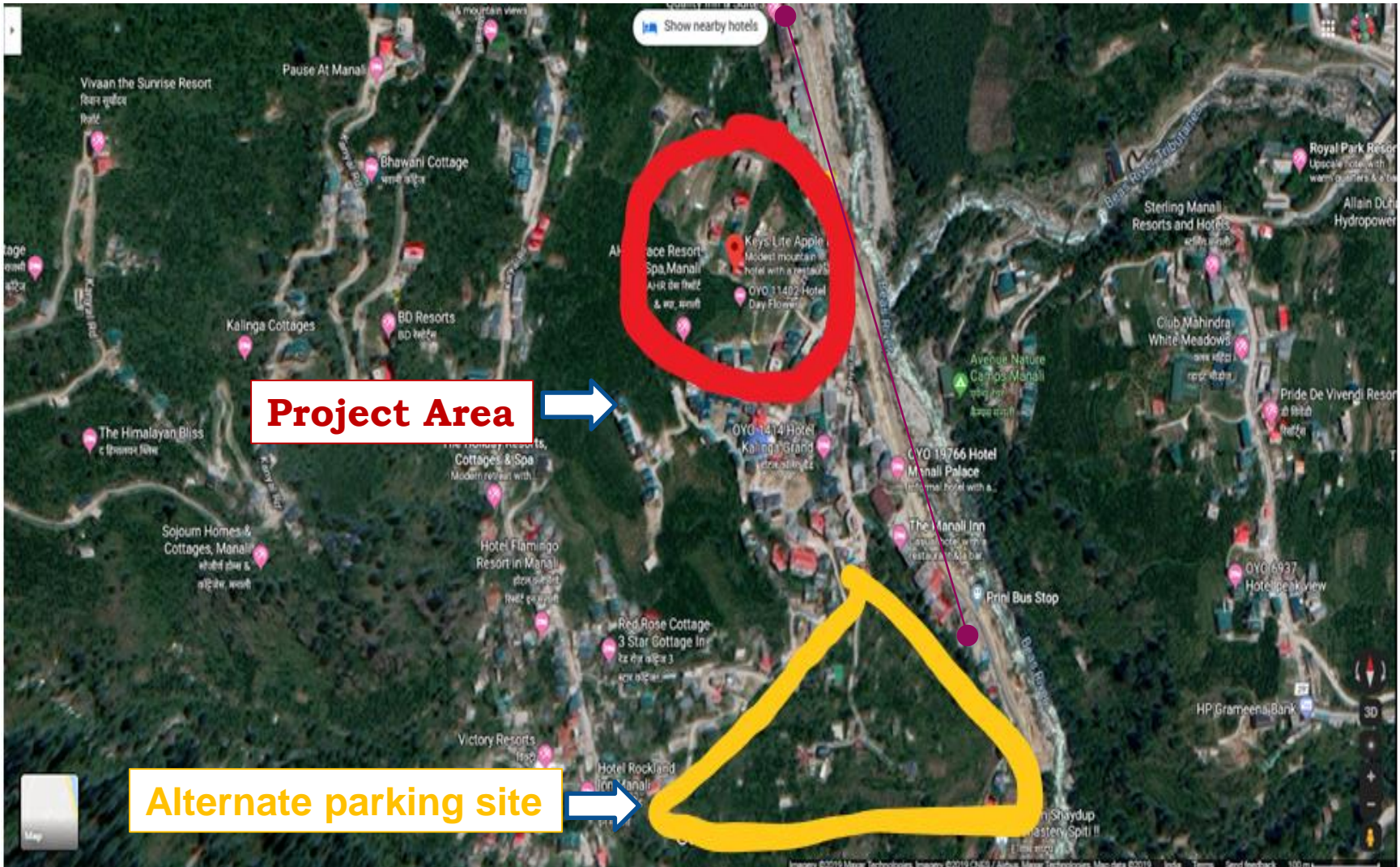


## Manali Town



## One way for Rohtang





# PARKING



# CONT...

- Dedicated team – all stakeholders included
- 2Ws – locals – priority in one way
- Prioritize E-buses for Rohtang visit – free passage and cost one fifth of private vehicles
- Engage local youth and employment generation – taxi operators and amenities in parking area



# IT INTERVENTIONS

- ✓ E-ticketing
- ✓ Smart card – integrations of services/fare
- ✓ Command and control centre – live feed, ops, maintenance
- ✓ E-bus

## **FUTURE COURSE**

- Mobile based application – developed – under audit with DIT
- Training and team building



**QUESTIONS/SUGGESTIONS**