

SMART CITIES – PUBLIC TRANSPORTATION & POWER GENERATION

F A Q – (frequently asked questions)

1. Describe your Startup in a few lines.

A Great saying: - Three (3) stupid stages in life



Most of the population on the Earth is in **Working Age**. If we can show the way to save the Public Time at least their travel time, this Startup will be a boon to mankind.

AIM:- I want to '**Relieve**' all the Urbanites --- (2 - Wheeler, 3 - Wheeler, 4 - Wheeler Owners) from '**Driving**' work, within two years from the execution of this Project.

Challenge:- No other 'MODE' of Transport in the world, can move men / materials with this 'Speed' in the congested colonies / cities.

It is almost a perfect answer for Driverless Car 'concept'. [Deliverable Story >>](#)



Solution:- **PROJECT**



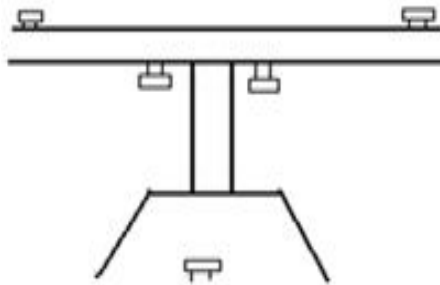
PROBLEM:- **TRAFFIC JAM**

2. A small brief on your products?

Why Traffic Jam Occurs?

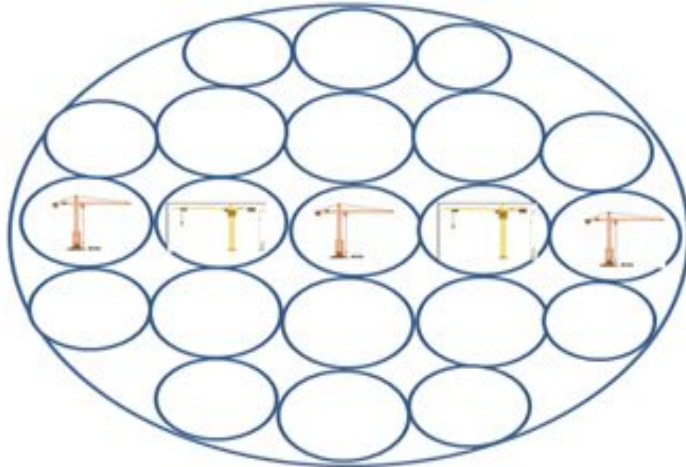
Roads are designed to handle certain level of traffic – Vehicular / Human. In due course, there will be increase in users, vehicles, and timing (People want to use the roads at the same time in their hurry, i.e., Office / School Time 09.00 a.m.)

In this project we use the Buildings / Apartments “Building Top” as our landing / boarding place. Every Building whether it is 2 floors, 5 floors or 10 floors will have a ‘Building Top’ which is lying idle. At present Tower Cranes are used for material handling at large construction sites only. They are having Lifting Capacity up to 100 Tons and their reaching distance is 200 meters (two sides) With little modifications in the design and **Integration** with latest available technologies in Lifts, Roller Coasters, Ropeways, etc, we can use them in Public Transportation. Thus, we can reduce the more than 50% of ‘congest’ on the roads.



There are some narrow lanes in a colony where two 2-wheelers cannot cross at a time.
There are some narrow streets in a colony where two 3-wheelers cannot cross at a time.
There some narrow roads in a colony where two 4-wheelers cannot cross at a time.

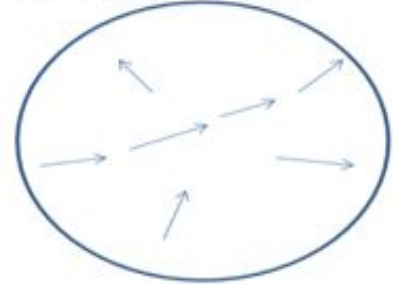
There are ATMs in the colony, in the streets where a lot of money transactions are taking place. The ATM entrance may be 3-ft width. Like that, we can collect people through small entrance in the congested / narrow streets, lift them to Building Top / Pick up Centre and shift them through modified Tower Cranes.(20-Passenger Trolleys, weight - say - 1 Ton).



1 k.m. Aerial distance, we have to
Instal 5 nos Tower Cranes to reach
Every corner of the Colony / City.

Tirupati City covers total
5 k.m. Aerial Distance

BLOCK DIAGRAMS -
BIRD'S EYE VIEW
FLY CARS INSTALLATIONS.



3 - D Animation Llnk:- (received from China)

https://www.youtube.com/watch?v=RQ97JbFSI_I&feature=youtu.be

3.. Output & Uses

(1) Ms. Cathy, Sales Engineer, Trading Company to Zoom lion, the 4th largest Tower Cranes Manufacturing Company in the world understood my concept and took pains (spent Amount:- INR 1,00,000/-) to get Design and 3D Animation by Government National Tower Crane Design Institute, China, and ready with quotation to supply the Machinery.

(2) Public Transportation can be possible with less than 20% fixed cost of the present Metro Rail Systems.

(3) The concepts like Smart Cities – Driverless Cars / car-less colonies / cities can be possibly executed for the benefit of all.

Railways Challenge:- [RAILWAYS >>](#)

TTD - [PILOT PROJECT DETAILS >>](#)

Pilot Project:-

My Profile Link:- <https://www.collaborizm.com/project/Syx187GU>

In the initial stages, we can start with a Pilot Project, say for 5 KM distance on the congested Roads of the City. We can work at night time and instal the infrastructure.

Pilot Project - at MUMBAI. Link:-

https://docs.google.com/presentation/d/1al6fFAq_CUtRKQX52kTxmkEePmky0YzaahuY898URcM/edit?usp=sharing

Demo Link

https://docs.google.com/presentation/d/179da8hPgl-R_W_wCyFeG-IRG0XE1Da_CK5UIST-eMH8/edit#slide=id.p4

Driver less Car - Deliverable Story - Link:-

https://docs.google.com/document/d/1F_O5kUamt8LIB9V9qg1oYhjl051qtcl3TVnomJ7_evs/edit?ts=5637ed97

4. What is your vision? How do you plan to make the world a better place?

With this Project we can expect de-conge station of Cities / Colonies.



Transportation / travel distance is one of the important criteria why some areas, are getting more and more crowded and become cities, resulting in evacuating nearby Villages / Districts. With this Project implementation we can achieve a great lead, as no other 'mode' of transport in the world, can move men / materials with this speed in the congested localities.

5. Who are the founders? and a short intro about them?

My name is Rama Linga Swamy, aged 58 years. I have 30 years experience in Accounts Wing in different Organizations including Engineering Colleges.

This concept and abstract notes I had prepared based on 'End user Imagination' only. From time to time my friends, Professors in Engineering Colleges encouraged & tendered their personal opinions while drafting this abstract at different stages, at different times, at different levels and contacts.

6. Where do you see the company in coming 5 and 15 years?

Because of its de conge station element, we can expect unlimited demand for the related products / machinery / services all over the world, through drastic downfall of dependency on presently available Transportation facilities like two-wheelers, three-wheelers, four-wheelers, etc. resulting in saving a lot of fast extinct fossil fuels, like Petrol and possibility for Pollution Control,

7. What do you think is your unfair advantage? or what separates your ideology from other organizations in the same field?

It is not a new Technology development. It is only INTEGRATION of latest available and proven Technologies in different spheres like Tower Cranes, Vertical Lifts, Roller Coasters, Ropeways, etc.

8. What is your end game?

Providing better life be to the mankind.

For this, a Corporation like DMRC – Delhi Metro Rail Corporation, has to be floated and entrust the task of Technical / Commercial feasibility study for INTEGRATION of latest available, proven technologies, in Tower Cranes, Lifts, Roller Coasters, Ropeways, etc for use in Public Transportation.

Preparation of - Legal Document - explaining the benefits like saving of huge foreign exchange, by minimizing the dependency fast extinct fossil fuels, like Petrol, Pollution control, etc, and submit to Supreme Court to get KEVET, so that nobody can get 'stay' on the Project. Attracting Investors / general Public through decentralization of Finance by making them Partners / Shareholders.

Important Links:-

Details Link:- <https://www.collaborizm.com/project/Syxl87GU>

Project – Innovation article is live at:

<http://www.ideaconnection.com/innovation-articles/driver-less-car-00593.html>

Roller Coaster Machinery can be viewed through following link:

<http://www.sciencechannel.com/video-topics/engineering-construction/machines-rollercoaster.htm>

In the above video we understand people move in open cars for adventurous Ride, whereas, in this Project, people move in closed Chambers, with required speed & safety for transportation and also able to generate Power.

Experts Views, etc

<https://docs.google.com/document/d/1lxO-52A7219SBr87ajHh0QwRafQ1juQi136-8SQ13K0/edit?usp=sharing>

Decentralization of Cities:-

https://docs.google.com/presentation/d/179da8hPgl-R_W_wCyFeG-IRG0XE1Da_CK5UIST-eMH8/edit?usp=sharing

Garuda Seva Project Link:-

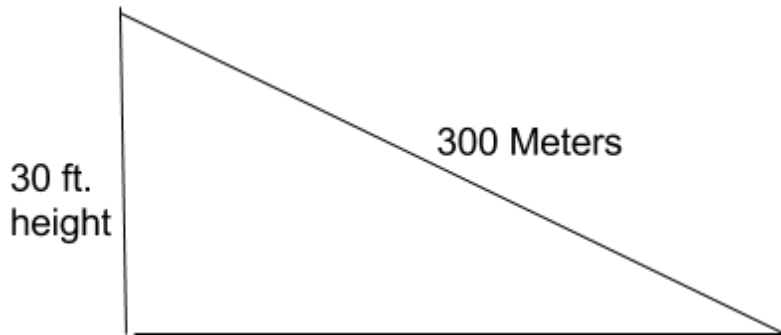
<https://docs.google.com/document/d/1IQoIGMNawAV130fV1-E-QxfGt-5quTGsi pP4XBsBSZk/edit?ts=5652916f>

Innovation article "POWER GENERATION - NEW ERA" is now live on Idea Connection™ at

<http://www.ideaconnection.com/innovation-articles/power-generation-new-era-00670.html>

https://docs.google.com/document/d/1O3FRBnFK_ed6xeobCAWhCg9Qn-4V9gxf2xbe_z9LkZU/edit

Power Generation Concepts



- (1) Power Generation at micro level (through number of Projects) even at 70% efficiency, resulting in self sufficiency and ultimately less load on grid electricity.
- (2) When Power Consumption (requirement) to lift 2 Tons Load (20 - passenger filled trolley) to a height of 30 ft is ----- 9 Units and generates Power when it slides to 300 meters distance-- 10 units on a ramp, it is good.

else, When Power Consumption (requirement) to lift 2 Tons Load (20 - passenger filled trolley) to a height of 30 ft is ----- 10 Units and generates Power when it slides to 300 meters only ----- 9 units ***still it is good***, because in this, Public shifted from one place to other (300 meters distance)

Requirement

T.T.D. (Tirumala Tirupati Devasthanams - web site: TTD), is the Administrative Office of Lord Balaji, the richest Hindu God in the world. The receipts through Offerings by Pilgrims is INR 2.5 Crs. (USD \$ 4, 17,000) per day. Lord Balaji's shrine is situated on Tirumala Hills, 25 km from Tirupati, India. Daily 1, 00,000 people are pouring in to Tirupati from all over India / world, through Railways / Buses and going up hills by walk / vehicles. This is creating heavy Traffic Jam Problem in Tirupati. Tirupati is a small City with 5 km radius, highly congested locality in Railway Station / Bus Station area.

TTD is now seriously searching 'ways & means' to take Pilgrims (1, 00,000) from Railway Station to 5 nos of Pilgrim amenity Centers situated around Railway station and also to foot hills of Tirumala.

We can use this Project and serve the Pilgrims, by shifting men / material comfortably.

We can shift Public in Trolleys on Railings laid on Pathway using Roller Coaster Technologies, etc. and save their time & energy and thus we get **Business**.

At a later stage, there is possibility for unlimited **Power Generation** in this Project.

3 - D Animation LInk:-

<https://he-s3.s3.amazonaws.com/media/sprint/harman-hackathon/team/63037/7013784new.swf>

From the Animation we can understand that Buses carrying Passengers are moving up & down Hills using this Project, without using Energy / Fuels.

Option 1:-

50 Passengers in '**DOWN**' coming Bus and 40 Passengers in '**UP**' going Bus.

With this criteria, the **Load** will be more at height, and hence the Buses will move up & down without using Energy / Fuels. On Tirumala Hills, there is always chance / possibility to have more number of persons waiting to come down. This is unique condition. Nowhere in the world this situation prevails.

Option 2:-

Whenever, there is situation prevails that, 40 Persons in the Down Bus and 50 persons in UP Bus, then we have to use Power / Energy to move the Load upwards. For this there are number of Points to be considered;

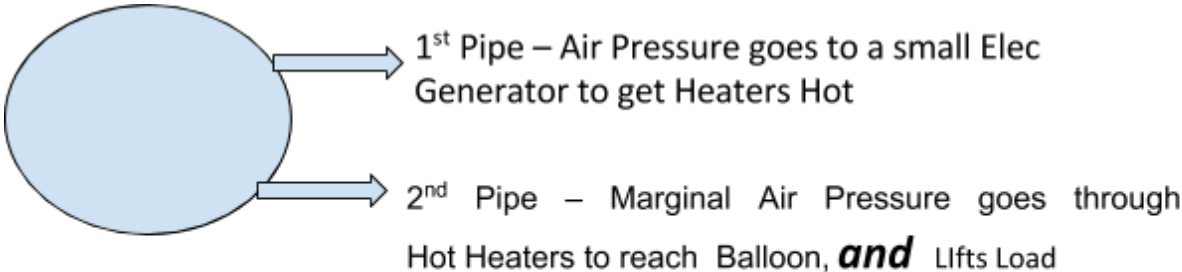
AIR PRESSURE: - Collection of Air Pressure.

(1) While 20 – Passenger Trolley (say, Load – 2 Tons) sliding down from Hill top, it will move with more speed and while nearing ground as its velocity will be rapidly increased. To limit & maintain, the speed of the Trolley at 20 KMPH, continuously from Top to Bottom, we can arrange Air Compressor Fan connected to a big Air Compressor Cylinder, which was kept underground, in a remote area.

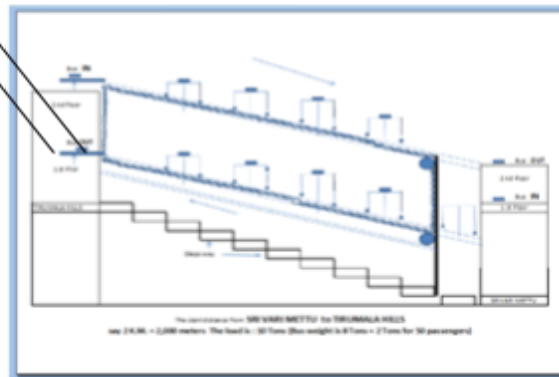
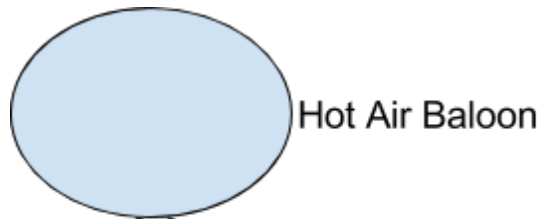
The collected Air Pressure can be used in overcoming the 'Torque' for the 'up going trolleys' to provide Kinetic Energy and hence, we can take Loads up Hill comparatively with ease (less energy to normal method).

(2) I had read news sometime ago, 40 – Police personnel patrolling in a boat in Water Reservoir in Andhra – Orissa Border area, Naxalites bombed and the boat drowned in the middle of the Reservoir. To bring back the boat to shore, 4 Large Hot Air Balloons were used, which have Lifting capacity to Lift up to 1 Ton each.

Like that, while our Load is going uphill, the above principle may be used.



Compressed Air Cylinder placed under ground at remote area



CYCLE CLUB ' CONCEPT'

Your “ **Health** “ is our concern

Your “ **Body Fit** “ is our aim

CYCLE CLUB

I want to suggest 'Cycle Club' concept for extensive usage of cycles all over the world.

Details Link:-<https://www.collaborizm.com/project/SkPYyeEi>

It can be started by any energetic and young Entrepreneur with limited investment.

Project Link:-

<https://docs.google.com/document/d/1bEfxBiugHVAuvM78pmT1BHdj7hZrrINBoP9yQj40U14/edit?ts=57e0e503>

To execute this Project, we should develop basic Software, (which can be modified / upgraded as per needs) to Operate 'Cycle Club', and then we can convince General Public to join us.

What kind of guidance / help / assistance - can I expect from you?

Cycle Kit:-

<https://docs.google.com/document/d/1SIv9NE2fpyze-uiNPoD6JpT3tH9UFRVLsSPtUlwDowo/edit>

POWER GENERATION – NEW ERA

In Hydro Electric Power Generation Projects, we are generating Power with the help of accumulated water in Reservoirs at height. We utilize the down flow water 'Pressure' to rotate Turbines.

In this Project, we use **people** ' **weight** ' **coming down from height**, to rotate Turbin,es.

Roller Coaster image & Link:-

https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcS8yIRtLgXdodymqOIXCJu4eJvIE MH7bZba_3_ol4I5K3hLWfju

<http://www.sciencechannel.com/video-topics/engineering-construction/machines-rollercoaster .htm>



This image are showing Public coming down on Roller Coaster in open cars for adventurous ride, whereas, in our Project, we can arrange cars enter in closed Chambers (with allowed slow speed for safety), which roll down to transport them up & down.

a) At New Delhi Railway Station, passengers getting down will move up to Foot Over Bridge to come out and to reach various parts of City through Metro Railway. A very little percentage of Public depend on their own vehicles, 3- wheelers or Public Transport.

We can shift the people from New Delhi Railway Station (Ajmere Gate Platform No.16, Foot over Bridge, say 30 ft. height) to Metro Station building top (height say, at 10 ft) using Roller coaster Technology and also we can generate Power using people movement and weight.

We can arrange 20-seater Passenger trolleys in racks readily available on the platform. When Passengers getting down through trains, they will be collected in trolleys and lifted to a height, say 30ft and then Rolled down to Metro Station.

We construct Ramp with allowed slope, in place of shelter over foot over bridge, put rails, on which the chambers with 20-passenger filled trolleys roll down.

With this Project, Power Can be generated and along with shifting of men / material between Stations.

Power Generation calculations on Tirumala Hills.

From SRIVARI METTU to Tirumala Hills the Slant Distance (say) 2 K.M. = 2,000 meters. Approximately, how much Power Can be generated when 10 Tons Load (8 Tons Bus + 2 Tons for 50 Passengers in the Bus) slides down on trolley.

A layman's -- 'Power Generation Calculations'. – 560 M.W.

As per notes from attachment, (Work & Energy Chapter – PAGE 6) the following is the 'Power Generation Calculation'.

Please follow Link:-

<http://www.onlineconversion.com/energy.htm>

One trip - 10 Tons Load (20 – Passenger filled car weight 2 Tons + 8 Tons Bus weight) generates 278 watt per hour as per enclosed attachments. - formula:- (load in kgs x gravity x ½ distance) 10000 x 10 x 1000 = 10,00,00,000 Joules = 27777.8W	27.778 Watts per hour
To transport up & down Hills, Pilgrims – 1,00,000 per day @ 50 persons in Bus per trip, the RTC will ply down 20,000 trips	20,000 trips per day
For every Trip load the Power generated will be	28 K W
For 20,000 trips down	560 m w

c) BRAWO

BENAGALURU RAIL & ROAD PATH WAY PROJECT

In the 24 hours of the day there may be 50 to 60 trains are 'coming in' and 'going out' of Benagaluru Railway Station. With every train bringing in 1000 passengers each, the number of passengers it is handling (1000 * 50) 50,000 people. And out of them (say) 5% will 'go out / coming in' in their own Vehicles, another 10% use Autos, the remaining passengers will come to Kempa Gowda Bus Station to go to their destinations through Buses.

Can we provide them easiest way to reach the Bus Station?

Project Name: - BENAGALURU RAIL & ROAD PATH WAY PROJECT.

People cross the Railway Platforms through "Foot Over Bridge". The Foot over Bridge height say 30 ft height. If we use a Lift for another 30 ft height, totaling the height is 60 ft height. From that height at the Centre of the Railway Platforms to Bus station we provide, a **Path Way**. It is just like a RAMP. People come down easily to Bus Station without any hurdles, like crossing Platforms, parking area, subway, steps, etc.

We can provide trolleys with 20 passengers (2 Tons weight approximately) each which can slide easily to the distance and save the time & energy of the Passengers.

Advantages in this Project:-

- (1) There is no Private Property in between these two points – Rly Stn & Bus Stn.
 - (2) The height of the Foot Over Bridge at Railway Station and the Ground Level at Bus Station may be more than 60 ft
 - (3) In addition movement of men / material, there will be scope of Power Generation – By sliding the 2 Tons Load Trolleys on the Rails on RAMP along with Pathway.
-

A layman's -- 'Power Generation Calculations'. - .5 M.W.

As per notes from attachment, (Work & Energy Chapter – PAGE 6) the following is the 'Power Generation Calculation'.

Please follow Link:-

<http://www.onlineconversion.com/energy.htm>

These calculations I made for Benagaluru Path Way Project.

2Tons Load (20 – Passenger filled car) generates 278 watt per hour as per enclosed attachments. 2000 x 10 x 50 = 10,00,000 Joules = 278W	278 W
When train arrives into Railway Station, let us say, 1000 Passengers reach, get down and use the Transport will be 800 nos. 800 Passengers will be transferred in 40 Loads (800/20 = 40).	40 Loads
For every 'four' loads the Power generated will be more than 1 Kilo Watt (4*278 = 1,112).	1 K W
With the Passengers in one train (40 Loads) we can generate 10 Kilo Watt Power per hour.	10 KW
With the Passengers from 50 trains per day, we can generate 50*10 = 500 (.5 MW) Power.	500 KW = <u>.5 MW</u>

"Divya Bharati" Project by TTD to engage the Pilgrims in Tirupati and allow limited number of Pilgrims to Tirumala Hills in rotation.
