



Analysing data to find likely regional Air passengers in Airports of small towns of Uttar Pradesh, India

Ravi Kant Gupta

Dr Sushil Pande, B B D University

1. Introduction :

We can't forget the days when we used horses on Carts as faster means of travel. Invention of "wheel" revolutionized our capability to move across long distances comfortably. Further inventions of automobiles, Railways and finally Aircraft made our travelling easy and faster. As we all know, now we use Civil Aircrafts to fly from one place to another. But still a large section of people have never flown in an Aircraft due to non-availability of low cost Air travel in their town or region in many parts of Indian states. This study is to draw attention and review in detail the current status of Civil Aviation with respect to Uttar Pradesh a major and most populous state in India.

2. Civil Aviation in India:

The civil aviation sector is vital to the growth of any economy as it enhances the globalization of economy on one side and on other side it is symbol of internal prosperity and well-being of society. Civil Aviation is a key to the growth of business, trade and tourism, with significant multiplier effects across the economy. Modern civil Aviation in India traces back to 18th February year 191, when the first commercial civil flight took off between Allahabad and Naini in Uttar Pradesh in India. As recorded in year 2016 air traffic of 130 million passengers included 100 million domestic passengers in India. As predicted by Airbus Industries France, India will be among top three aviation markets of world in the next two decades. Due to recent Government of India policies focused on growth and development of domestic civil Aviation market there is an expectation of surge of upto 20% in regional flights in all states of India put together.

3. (NCAP) National civil aviation policy 2016:

(MOCA) Ministry of civil aviation in June 2016 as part of Government of India released the National Civil Aviation Policy covering Regional connectivity Scheme and related areas of Civil Aviation.

4. UDAN-RCS Scheme in Uttar Pradesh(UP):

UDAN the Regional Connectivity Scheme (RCS) implementation in UP has been considered as per following features:

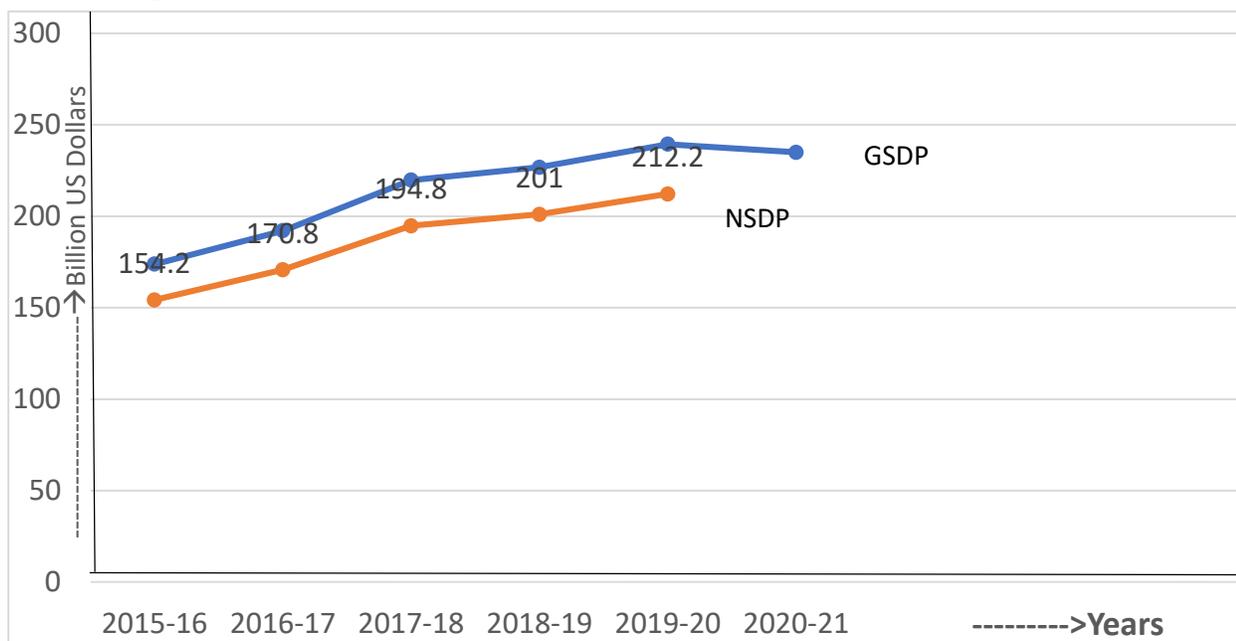
- During last three to four years domestic passenger growth is reported above 18 percent in India, which indicates high growth rate in domestic civil aviation in the state of UP.
- The underserved and unserved airports in Uttar Pradesh are planned to be utilized under UDAN Scheme. Operators will be provided with incentives to include non RCS airports in this scheme. These incentives are for one year and are only applicable to single flight per route to the first Operator/bidder/proposer. New flights connecting a non-RCS airport to non-RCS airport within or outside Uttar Pradesh will have following incentives/concessions:
 - ◆ Value Added Tax on Aircraft Turbine Fuel is waived-off for one year.
 - ◆ State GST on sale of air tickets will be reimbursed by state government on sale of air tickets on per month basis for one year.
 - ◆ Operators will be extended state support equivalent to Viability Gap Funding share on half of total seats maximum upto forty seats.
 - ◆ Operators will be extended state support by underwriting Rs Two thousand five hundred per vacant seat on fifteen percent of total seats i.e up to three hundred sixty seats per month per one way trip.

As per RCS policy the further support offered by the Uttar Pradesh Government at its airports shall be as follows:

- UP Government shall provide free of cost land to develop RCS Airports alongwith connectivity with main road, rail, metro, waterways, etc, as required.
- On ATF VAT to 1% or less will be charged within the State for 10 years. Since the date of GST implementation suitable concessions shall be given to enable minimum taxation limit benefits to the applicant of this scheme.
- UP govt will coordinate with oil companies for providing the fuel (ATF) on best term
- UP Govt will provide security and fire services at RCS Airports by providing trained personnel and equipment as per guidelines on free of cost basis.
- At RCS airports electricity, water etc shall be provided by UP Govt at concessional rates.
- As theme of UDAN is such that it invites all citizens (aam nagrik) to fly at cheaper air tickets sponsored by Government, the Underserved and Unserved Airports of towns of Uttar Pradesh will be made Operational with better Airport infrastructure. We know that **Underserved Airports** are those airports which have less than Seven departures/week as per approved schedule and **Unserved Airports** are those airports which have no flights during the last two flight approved schedules.

- In line with a MOU between Uttar Pradesh government , Ministry and AAI UP Government will provide the above mentioned concessions along with following additional benefits:
 - The VGF applicable shall be shared by UP Government upto 20% by reimbursing it within 3 months when demanded by Central Government.
 - UP government shall underwrite non VGF seats up to 30% but with a condition that reimbursement land has been purchased to develop Ayodhya Airport for aircrafts of the standard of A-321 and Boeing-787.

5. Study of Current Socio-Economic status of UP



- As per above chart the GSDP (Gross State Domestic Product) of Uttar Pradesh in India has continuous annual growth rate of 8.43% upto 2020-21 (from 2015-16) to reach US\$ 234.96 billion. The NSDP (Net State Domestic Product) has also shown to have same growth rate so as to reach US\$ 208.34 billion figure.
- In spite of having the highest population in India of around twenty crore people, the financial growth of state has been remarkably good.
- State of Uttar Pradesh in the northern part of India has been always a centre of attraction for culturally rich traditional people.
- Uttar Pradesh has a very high national / international tourists visiting the world famous Taj Mahal at Agra roughly amounting to 5 million tourists.
- Uttar Pradesh is also famous for religious places like Ayodhya, Kashi (Varanasi), Mathura etc.
- The Electricity generation of the tune of twenty nine thousand Mega Watt has made Uttar Pradesh a power self-sufficient state resulting into ever increasing industrial growth.
- The Uttar Pradesh Government has provided best infrastructure supported with favorable industrial policies best suited for businesses like Information Technology (IT), agriculture based

automatic plants, textiles, tourism ,light and heavy engineering goods, food processing industry, sports goods, biotechnology,.

- Uttar Pradesh has a good connectivity to all its cities through around 50 national highways, 6 airports and rail links. The state has adopted PPP (Public-Private-Partnership) model to develop its infrastructure and industrial /business hubs during recent period.
- The state of Uttar Pradesh has a good track record of direct Export to other countries worth approximately US\$ 20 billion as per current estimates.
- Uttar Pradesh in India has got FDI (Foreign Direct Investment) of roughly US\$ 665 million between October 2019 and March 2021 according to the DPIIT data.
- Industrialization in Uttar Pradesh has grown manifold during last 6 to 7 years with the implementation of One District One Product Scheme in all Districts of Uttar Pradesh.
- New schemes of creation of local Markets for Locally manufactured products has given impetus to local entrepreneurs and business growth in general.
- Due to substantial industrial drive in Uttar Pradesh, it has become a mandatory step to support this growth of production with means of easier and quicker transportation of goods and services.
- Keeping this in mind the regional civil aviation scheme is emphasized in this region not as a general Government scheme but as a need of people.

6. Current Status of Civil aviation in UP

- Uttar Pradesh has allocated Rs 2,307 crore for the civil aviation sector as compared to Rs 347 crores in 2016. Up to 2019 Prayagraj, Kanpur and Hindon Airports have got operational status. All over India major 63 cities are air connected to 25 cities of Uttar Pradesh.
- It is further planned to operationalize 21 more airports in UP. Under RCS by 2023 construction work of selected Chitrakoot, Aligarh, Sonbhadra, Moradabad, Azamgarh and Shravasti shall be completed. Development of new airports in Saharanpur, Jhansi and Lalitpur districts is under completion. Zewar Airport near Meerut has been recently inaugurated by Prime Minister of India.
- Government of Uttar Pradesh has made a remarkable growth in the civil aviation sector in the past 4 years with a vision of creating a network of air connectivity uniformly connecting every part of country duly approachable by UP people.
- Uttar Pradesh Government has a roadmap ready to have the highest number of operational airports both domestic and international before 2025. This can be appreciated in view of the fact that upto 2017 the state had only four working airports since 1947.
- In Ayodhya an international Airport for A-321 and Boeing 787 like civil aircrafts is envisioned and UP Government has already allocated approximately US \$ 85 billion and acquired 185 acres of land. Soon it is going to be a reality and with the Development of Ram Mandir Ayodhya will become international tourist attraction all over the world.
- The government of India has established Defense Corridor in Uttar Pradesh where a large number of National as well as International Defense Industry persons will commute through regional flights and the regional civil aviation network will be further strengthened.

7. Status of Civil Aircraft Manufacturing:

- Dornier Aircraft was once made part of Vayudoot Airlines as JV joint Venture between Indian Airlines and Air India on January 1981 mainly focused to serve in North Eastern destinations. But due to economic issues and lower passenger availability it was closed in 1997. However HAL has commenced Licensed manufacturing of Dornier 228 (19 seater aircraft) at its Kanpur factory since 1985. A total of around 150 Dornier 228s had been produced in India by HAL Transport Aircraft Division, Kanpur, UP.
- 19 seater , 2 row, State of the art Glass cockpit fitted Dornier-228 Aircraft has been given DGCA clearance for production by HAL for Civil Flights within India.
- Recently many Regional Aircraft Operators have shown keen interest in buying HAL manufactured Do-228 for regional civil operations.
- HAL produced ALH Dhruv (12+2 passenger), and LUH (6+2 passenger), helicopters are good options for regional connectivity.



- Besides Pawan hans ltd provides Helicopter services in Uttar Pradesh for RCS Scheme.

8. Study of aviation Infrastructure in UP:

- UP has Ten operating Airports, namely- Lucknow, Kanpur, Varanasi, Prayagraj, Agra, Gorakhpur, Ghaziabad, Bareilly, Moradabad, Kushinagar. Out of these Lucknow, Varanasi, Prayagraj, Gorakhpur have regular domestic flights so as enable make study of published passenger data for estimation of possible passenger turnouts at other towns/airports of UP.
- Review of possibilities of Sea plane/ Amphibian planes usage in cities of Uttar Pradesh having big rivers and water bodies is also under consideration of Civil Aviation Ministry.
- A critical Analysis of UP's 30 Airports with respect to UDAN – RCS Scheme is placed herewith:
 1. Infrastructure required for Regional Connectivity in UP is already in good shape and ready for day to day operations in Major ten airports shown in following table as fully operational.
 2. While another set of balance Airports of around 20 in numbers have basic infrastructure only and the other incremental facilities needs to be provided by UP Government to make them fully operational. Thus these are shown with remarks as "Additional Infrastructure required".

3. Wherever IAF (Indian Air Force) and AAI (Airports Authority of India) have developed the Airports most of them are already in operational stage.
4. Airports under ownership of Government of UP are also having basic infrastructure but the incremental facilities are required to develop these Airports into full-fledged Civil Airports.
5. As per below Table 10 Airports are equipped to handle Aircrafts with weight of 5700 Kgs or more. Thus the Aircraft of category of Boeing747 / Airbus A320 etc can land and takeoff with passenger or Cargo easily from these Airports. Further Jewar and Ayodhya Airports are also being developed on same lines.
6. Other than these 12 Airports all other 18 Airports / Government of UP owned Airstrips are useful for less than 5700 Kg weight Aircrafts of 19 to 75 seating capacity for regional civil flights, because of smaller Airstrips.
7. Still most of 18 Airstrips and Airports do not have ATC (Aircraft Traffic Control) facility. Many of these are lacking in basic civil safety parameters like enclosed safe boundry, Covered Shed, Air traffic control tower, communication equipment, Passenger waiting rooms, proper Apron, Aircraft parking, emergency landing handling equipment, Night landing and takeoff, alternate Airstrips etc.
8. However , it will not be out of place to mention that the way Government of Uttar Pradesh and central Civil Aviation is geared up for these airfields and airport's modification it will be very soon that all the Airports as per list below will have huge rush of passengers.

Sl. No.	Airport	District	Owner	Aircrafts Capacity	Airport Category	Remarks
1	Chaudhri Charan Singh Internl Airport	Lucknow	AAI	>5.7MT	Internl Airport	Fully Operational
2	Lal Bahadur Shastri Internl Airport	Varanasi	AAI	>5.7MT	Internl Airport	Fully Operational
3	Gorakhpur Civil Terminal	Gorakhpur	IAF/AAI	>5.7MT	Operational	Fully Operational
4	Bamrauli Civil Terminal	Allahabad	IAF/AAI	>5.7MT	Operational	Fully Operational
5	Kanpur Chakeri	Kanpur	IAF/AAI	>5.7MT	Unservd	Fully Operational
6	Agra Civil Terminal	Agra	IAF/AAI	>5.7MT	Underserved	Fully Operational
7	Trishul Airport	Bareilly	IAF	>5.7MT	Unservd	Fully Operational
8	Hindan	Ghaziabad	IAF	>5.7MT	Unservd	Fully Operational
9	Moradabad	Moradabad	UP Govt	>5.7MT	Operational	Fully Operational
10	Kasia	Kushinagar	UP Govt	>5.7MT	New Internl Airport	Fully Operational
11	Sarsawa	Saharanpur	IAF	< 5.7MT	Unservd	Addl infra reqd
12	Dr. Bhim Rao Ambedkar (Partapur)	Meerut	UP Govt	< 5.7MT	Unservd	Addl infra reqd
13	Faizabad	Faizabad	UP Govt	< 5.7MT	Unservd	Addl infra reqd
14	Jhansi	Jhansi	UP Govt	< 5.7MT	Unservd	Addl infra reqd
15	Chitrakoot	Chitrakoot	UP Govt	< 5.7MT	Non Operational	Addl infra reqd
16	Dhanipur	Aligarh	UP Govt	< 5.7MT	Unservd	Addl infra reqd
17	Azamgarh	Azamgarh	UP Govt	< 5.7MT	Unservd	Addl infra reqd
18	Myorpur	Sonbhadra	UP Govt	< 5.7MT	Unservd	Addl infra reqd
19	Shravasti	Shravasti	UP Govt	< 5.7MT	Unservd	Addl infra reqd
20	Akbarpur	Ambedkar Nagar	UP Govt	< 5.7MT	Unservd	Addl infra reqd
21	Saifai	Etawah	UP Govt	< 5.7MT	Unservd	Addl infra reqd
22	Andhau	Ghazipur	UP Govt	< 5.7MT	Unservd	Addl infra reqd
23	Amhat	Sultanpur	UP Govt	< 5.7MT	Unservd	Addl infra reqd

24	Paliya	Kheri	UP Govt	< 5.7MT	Unserved	Addl infra reqd
25	Farrukhabad	Farrukhabad	UP Govt	< 5.7MT	Unserved	Addl infra reqd
26	Fursatganj (IGRUA)	Amethi	AAI	< 5.7MT	Unserved	Addl infra reqd
27	Lalitpur	Lalitpur	IAF/AAI	< 5.7MT	Unserved	Addl infra reqd
28	Jewar	Noida	AAI	>5.7MT	Upcoming Internl Airport	Addl infra reqd
29	Ayodhya	Faizabad	AAI	>5.7MT	Upcoming Internl Airport	Addl infra reqd

9. Objective of Research and Hypothesis :

When all is well then why common people of Uttar Pradesh have not flown in aircraft so far? The reason being, in spite of all Government of India and Government of Uttar Pradesh efforts, entrepreneurs and Airline operates have not come forward so far to actively bid in UDAN RCS now routes. As on date hardly 8 to 10 Airlines like, alliance Air, Air Deccan, Air Heritage, Star Air, TruJet, Zoom Air, Jagson, Pawan hans etc have started operating in regional Civil air routes under this scheme. Objective of research is to find the gap between the current civil aviation level in Uttar Pradesh as Government Schemes has envisaged and the actual ground realities in the region. Further to bridge this Gap it is needed that further innovative approaches to be undertaken by responsible operators and Government of Uttar Pradesh. Research Design is Descriptive cum exploratory.

Besides based on data collection (both primary and secondary) the problems of stakeholders viz, customers, operators and Government have been analyzed. Primary data is collected from-Airport authorities, State Government civil aviation department, from sample respondents and secondary data from-Internet, Government Websites and official statistical documents, Published books, journals and Research Papers and News Paper and Magazines

Thus based on data a Linear multiple regression formula ;

$Y = a + b_1X_1 + b_2X_2$ to be formulated in order to estimate number of annual passenger turnout in towns of Uttar Pradesh based on its dependency on multiple variables.

Testing of Hypothesis: -

- $H_0 \rightarrow$ The data is not significant for study of Civil Aviation in small towns of Uttar Pradesh. i.e constants $b_1=0$ and $b_2=0$
- $H_1 \rightarrow$ At least one of b_1 and b_2 is not equal to zero and data is significant for Passenger estimation.

10. Statistical Analysis and Hypothesis testing

An analysis of available data for 4 major airports in Uttar Pradesh has been done to arrive at a possible formula through regression analysis. These airports are lucknow, Varanasi, gorakhpur, and prayagraj. this is done the because data recording literacy , population , area of district , per capita income , airport capacity are used as the factors for analyzing and to find out a linear regression equation for arriving at estimated passengers in lakhs based on the equation. The table is reproduced below for a fair estimation of likely passengers in different airports at various location in different towns of Uttar Pradesh at 5% significance level.

Name of Airport	City/Town	Passengers FY 2020-21 (in Lakhs)	Population (lakhs)	Per capita income	Airport capacity	literacy	Area of District	Population Factor (X1)	Income factor (within 100 km of Airport) (X2)
			A	B	C	D	E	(AxDxC)/E	Bx100/E
Chaudhary charan Singh Internl Airport	Lucknow	24.41	45.9	101745	4000	77.29	2528	5613.31	4024.72
Lal bahadur shastri Internl Airport	Varanasi	14.67	36.77	57757	800	75.6	1535	1448.76	3762.67
Gorakhpur Airport	Gorakhpur	5.01	44.41	50809	300	70.83	3448	273.69	1473.58
Allahabad Airport	Prayagraj	3.47	59.54	71894	300	72.32	5482	235.64	1311.46

Data Analysis: Data is analyzed through MS-EXCEL Regression tool for X1 and X2

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.99925733
R Square	0.998515211
Adjusted R Square	0.995545633
Standard Error	0.647951855
Observation	4

Interpretation of Regression Statistics Table :

$R^2 = 0.9985$, which gives overall goodness-of-fit measures, means that 99.85 % of the variation is well explained by regressors X1 and X2.

ANOVA

	df	SS	MS	F	Significance F
Regression	2	285.3419835	141.1709918	336.2482174	0.038532958
Residual	1	0.419841606	0.419841606		
Total	3	282.7618251			

Interpretation of ANOVA Table :

The column labeled significance F has the associated P-value. Since 0.0385 is lesser than 0.05, H_0 - the Null Hypothesis at significance level 0.05 is rejected and H_1 accepted.

	COEFFICIENTS	STANDARD ERROR	t START	P-VALUE	LOWER95%	UPPER 95%
Intercept	-0.989471767	0.866997445	-1.14126261	0.45806192	-12.0057188	10.02677527
X Variable1	0.002118419	0.000240168	8.820568066	0.071867606	-0.000933206	0.005170045
X Variable2	0.003355151	0.000421414	7.961656332	0.079544173	-0.001999418	0.008709719

Interpretation of Regression Coefficient Table :

Based on Coefficient table above the regression equation for estimated Passengers on yearly basis (numbers in Lakhs) is as follows:

$$Y = -0.99 + 0.00212(X_1) + 0.0034(X_2)$$

Based on the above equation likely passengers at various Airports of medium and small towns of Uttar Pradesh have been estimated (Y) based on input independent variables X1 & X2 and produced in the form of a table below.

Estimation and Limitation of EXCEL:

Estimation in Airport capacity is taken based on minimum possible 50 passengers to find estimates of likely passengers at that Town's Airport/Airfield. This exercise is to demonstrate possibility of finding the number of estimated passengers at any airport based on correctness of data through statistical Analysis. The secondary data for population (2021-22) of towns of UP is based on website <https://www.indiacensus.net/states/uttar.pradesh> and the other websites as mentioned in references.

List of Airports at small and big Towns of Uttar Pradesh with Estimated passengers per annum (column Y)

Sl. No.	Name of Airport	Name of District	Estimated passenger (Y)	population	literacy	Area of District	per capita income	airport capacity	Actual passenger FY20-21
1	Chaudhri Charan Singh Internl Airport	Lucknow	24.45	45.9	77.29	2528	101745	3950	24.41
2	Lal Bahadur Shastri Internl Airport	Varanasi	14.68	36.77	75.6	1535	57757	750	14.67
3	Gorakhpur Civil Terminal	Gorakhpur	4.99	44.41	70.83	3448	50809	500	5.01
4	Bamrauli Civil Terminal	Allahabad	3.80	59.54	72.32	5482	71894	200	3.47
5	Kanpur Chakeri Civil Terminal	Kanpur	9.34	45.81	79.65	3155	91266	200	
6	Agra Civil Terminal	Agra	7.99	44.19	71.58	4027	102423	200	
7	Trishul Airport	Bareilly	5.36	51.54	58.49	4120	76009	50	
8	Hindan	Ghaziabad	27.09	46.82	78.07	1034	84258	50	
9	Moradabad	Moradabad	5.42	55.29	56.77	3741	69534	50	
10	Kasia	Kushinagar	4.71	41.3	65.25	2874	39812	500	
11	Sarsawa	Saharanpur	4.66	40.16	70.49	3860	63264	50	
12	Dr. Bhim Rao Ambedkar (Partapur)	Meerut	15.73	15.71	70.75	2522	123663	50	
13	Faizabad	Faizabad	5.74	24.71	68.73	2522	49425	50	
14	Jhansi	Jhansi	4.43	23.15	75.05	5024	79491	50	
15	Chitrakoot	Chitrakoot	2.93	11.19	65.05	3415	39128	50	
16	Dhanipur	Aligarh	5.02	42.56	67.52	3788	66104	50	
17	Azamgarh	Azamgarh	2.31	53.56	70.93	4054	38196	50	
18	Myorpur	Sonbhadra	1.96	21.58	64.03	6788	58447	50	
19	Shravasti	Shravasti	6.77	12.94	46.74	1640	37252	50	
20	Akbarpur	Ambedkar Nagar	4.78	23.98	72.23	2350	39326	50	
21	Saifai	Etawah	8.38	15.82	78.41	2311	63303	50	
22	Andhau	Ghazipur	2.81	41.94	71.78	3377	36799	50	
23	Amhat	Sultanpur	4.34	24.31	69.27	2773	42920	50	
24	Paliya	Kheri	1.50	46.59	60.65	7680	55384	50	
25	Farrukhabad	Farrukhabad	6.23	18.85	69.04	2280	48042	50	
26	Fursatganj (IGRUA)	Amethi	7.11	11.19	59.41	2330	55294	50	
27	Lalitpur	Lalitpur	3.37	12.22	63.32	5039	64399	50	
28	Jewar	Noida	13.01	16.48	80.12	14442	594171	50	
29	Ayodhya	Faizabad	5.74	24.71	68.73	2522	49425	50	

11. Conclusion/Recommendation

While Analyzing the existing Government Policies like UDAN-RCS, NCAP(2016) and current position of Civil Aviation in small towns of Uttar Pradesh few conclusions/ recommendations are as follows:

Stakeholder 1 (Government of Uttar Pradesh),

- The findings (namely Y values) in the above table shows a huge possibility of passenger turnouts in even small towns of UP. So business is assured in airports but before we consider the results we must take a look at the pre-requisites. The data is dependent on population factor, per capita income, Airport capacity, literacy and geographical area. We cannot change other factors but we can increase Airport capacity, per capita income by establishing more business in area to thrive on Civil Aviation business. Besides we have to improve Airports for poor infrastructure including the lack of availability of bays, number of efficient pilots, economically viable air routes etc. Further following points may be considered :
 - Reserving at least 20 to 30% bays for the regional routes at the major airports.
 - Improvement in infrastructure at all 29 Airports of Uttar Pradesh to cater to increasing requirements of UDAN-RCS Air Traffic.
 - Non Availability of Airports –there are only 4 UDAN-RCS operating IAF Airports in UP (Agra, Allahabad, Kanpur, Hindon), further IAF Airports and 16 UP state owned Airstrips need to be developed for UDAN-RCS for ensuring minimum connectivity.
 - Helipads and infrastructure are not sufficient for RCS and more helicopter operators need to be encouraged for better regional connectivity.
 - Water Aerodromes need to be developed in UP meeting all technical requirements.

Stakeholder 2 (Airline Operators)

- It has been also predicted from above study that Civil Aviation business model as per RCS has a large untapped potential for well-established Operators as well as small Airline operators. But still this scheme is not viable because of the huge fund investment requirements by small operators and lack of economic business for big Operators. So Operators can make use of this data to work out once again their marketing strategies focusing on high income group segment of the region basically business class and high income group people. However, RCS must focus on small aircraft operators because the Aircrafts below 5.7 MT can operate from smaller airstrips.
- Airports / Airstrips chosen do not support business activities. There has to be a long-term marketing strategy to attract traffic in all segments whether it is for Business, pilgrimage, Leisure traffic or local traffic. As per study higher the income of the passenger there is more

demand for air travel. Moreover, the presence of more business through industries and the services sector will maintain the passenger outflow and inflow in the region. UDAN-RCS has to be linked with ODOP in UP for more customers for regional Operators.

4. Non Availability of Flights in small Towns due to lesser routes. Therefore more routes to be scheduled to ensure bare minimum connectivity within UP's major cities.
5. There is lack of awareness/ promotional marketing strategy / activities both from Government side and from Airline operators to make customers aware of new flights and connectivity between towns.
6. The Price Tag of Rs 2500/RCS seat may be reviewed for wider acceptance of poor customers of UP. If Operators need more support in initial set up then more financial schemes from nationalized Banks for operators may be included in next revised schemes. Thus there is a need to create an ecosystem for Regional Civil Aviation operators to overcome their difficulties to overcome fear of losses.
7. It is confirmed that considerable improvements have been observed in UDAN-RCS participation due to UP Government's commendable efforts on continuous basis and same has to be constantly improved linking already successful major business/ industrial schemes like Defense Corridor and ODOP (One District One Product).
8. A roadmap to be made for providing infrastructure to operators for scheduling their flights from RCS Airports with continuous feedback system for providing more incentives. This will encourage more operators to participate in RCS-UDAN and new routes may be requested by operators which may further indicate need to augment the existing infrastructure as required along with growing air traffic.
9. UP Government can plan for financial leasing of Indigenously manufactured Hindustan-228 aircraft, ALH (Dhruv) Helicopters etc with agreement between HAL (Hindustan Aeronautics Limited) , the Banks, operators and Insurance companies. This will encourage operators / Aircraft companies to start their operations as per NCAP.
10. The gaps in traffic management, Air ambulances and regional connection between Army and Police forces intercity movements/ operations can be planned through RCS-UDAN.

Stakeholder 3 (The People of Uttar Pradesh)

11. The better Regional connectivity in Uttar Pradesh will help local products of fame like Bhadoi Carpets, Moradabad Brassware, Products of various districts under ODOP to reach National and International Markets direct from Local common small scale manufacturers rather than through selling agents.
12. Most importantly the people of Uttar Pradesh will be benefitted from cheaper air tickets with improvement in Civil aviation infrastructure and increase of competition with the hustle bustle of roaring aircrafts in neighborhood.

13. The business opportunity for people near airports and local markets will certainly increase due to frequent air passengers in town. The markets and Malls nearby will have more visitors.
14. Tourism industry, pilgrimages will be easy for old age and young kids within state.
15. As we know "Time is money" and better civil aviation in towns of Uttar Pradesh can only help in saving time and in turn money of people.

12. References:

Following references are used in preparing this review:

1. <https://en.wikipedia.org/wiki/UDAN>
2. <http://odopup.in>
3. <http://cadup.gov.in/uprcs.html>
4. <https://www.civilaviation.gov.in>
5. <https://en.wikipedia.org/wiki/UDAN>
6. <https://niveshmitra.up.nic.in/civilAviationPolicy.apx>
7. www.dgca.gov.in
8. <https://www.pawanhans.co.in>
9. <https://www.aai.aero>
10. www.hal-india.co.in
11. <https://www.indiacensus.net/states/uttar.pradesh>
12. www.sciencedirect.com
13. <https://www.ibef.org/states/uttarpradesh-presentation>
14. <http://docplayer.net/>