



लोक अभियान

Odd - Even survey report



**Odd - Even
No gain
Only pain**

Executive Summary

The Delhi government from January 1st 2016 implemented the Odd Even scheme in the national capital on a trial basis for 15 days i.e. till January 15th 2016. Due to the claimed success of the scheme the Delhi government brought back the scheme from April 15th to 30th. This drastic measure was taken after the Delhi High Court called the capital a “gas chamber” and a report published by IIT Kanpur and air quality data index monitored by the Central Pollution Control Board (CPCB) revealed that the air in Delhi was way above safe limits. The scheme exempted two wheelers, women drivers and taxis apart from VIP vehicles and electric, hybrid and CNG vehicles.

The first phase of Odd Even had inconclusive evidence on its impact to curb pollution. Some reports even claimed that pollution levels had indeed increased. The positive highlight of the scheme was that traffic reduced and there was perceived higher compliance as fewer challans were issued compared to the second phase. The important point to note was that schools were shut during this time and because people thought this was a temporary measure and hence did not buy additional vehicles to beat the odds of the scheme. The government post the first phase conducted a survey to gauge public opinion and claimed that people of Delhi want the scheme again. This survey many claim was flawed because of the biased sample and thus was not truly representative of the ground reality. Due to this reason and the fact that many other factors like people buying additional cars, consistently no reduction in pollution, relative traffic increase, Lok Abhiyaan decided to conduct a survey in its second phase to reflect public perception.

The survey findings clearly indicate that the odd even scheme has not found favour with the people of Delhi as the respondents were highly critical of not only the way it was implemented but also of the objectives it failed to achieve. Around 3/4th of the respondents rejected the scheme terming it as a failed venture. Even 31% of those who said that the odd even scheme is successful did not want it to continue as a permanent feature.

To combat pollution effectively Lok Abhiyaan with its research and interactions with the public suggests implementable measures such as increasing the number of PUCs and strict monitoring of polluting vehicles, efforts by the government to increase the average speed of the car, road vacuuming, putting a stop to solid waste burning and aggressive plantation drives.

About Lok Abhiyaan

Lok Abhiyaan is a social organization that has been working for the social welfare of people for the past 30 years. The most impactful work by Lok Abhiyaan has been the Anti lottery campaign. Lok Abhiyaan also help facilitate discussions between government and public to ensure various public problems are highlighted and resolved.

What is the Odd Even Scheme?

Odd Even scheme is a road-rationing scheme for cars, which aims at curbing vehicular pollution in the national capital by letting odd or even numbered cars ply on the roads in accordance with the date so only odd numbered cars are allowed on odd dates of the month. The first trial phase of the scheme was enforced from Jan 1st to Jan 15th 2016 and the second phase was implemented from Apr 15th to Apr 30th 2016.

Odd Even scheme in the Delhi context:

As per the Odd Even rule in the capital, for 15 days, odd numbered cars were allowed on odd dates and even numbered cars on even from 8.00 am to 8.00 pm. On Sundays, there was an exception and all cars were allowed to ply on the roads. A fine of Rs 2,000 was levied on those breaking the rule.

List of People/groups exempted from complying with the rule:

- Vehicles of the VIPs of the country (Prime Minister, Union ministers, Chief Justice, Chief Ministers etc.)

- Emergency Vehicles i.e. ambulance, fire brigade and hospital, prison and hearse vehicles 17. Enforcement vehicles i.e. vehicles of Police, Transport Department, vehicles authorised by the Divisional Commissioner GNCTD, paramilitary forces etc.
- Vehicles bearing Ministry of Defence number plates
- Vehicles which are having a pilot/escort
- Vehicles of SPG protectees
- Embassy vehicles bearing CD numbers
- Compressed Natural Gas-driven vehicles, Electric Vehicles, Hybrid Vehicles
- Vehicles being used for medical emergencies (will be trust based)
- Women only vehicles - including children of age up to 12 years travelling with them.
- Vehicles driven/occupied by handicapped persons.
- Vehicles carrying children in school uniform

Taxis: 79606

**Total Vehicles in
Delhi : 8827431**

Buses:8572

**Cars and Jeeps:
2790566**

**Motorcycles and Scooters:
5681265**

Auto Rickshaws: 81633

Why did the Delhi Government implement this scheme?

Delhi High Court

Observing that the current air pollution levels in the national capital have reached "alarming" proportions and it was akin to "living in a gas chamber", the Delhi High Court on December 3 2015 directed the Centre and city government to present comprehensive action plans to combat it.

The court also said two major causes of air pollution in Delhi were dust particles and vehicular emissions and directed the Centre and city governments to ensure no construction of building or roads takes place without first ensuring that generation of dust was minimized.

It also directed the Delhi government to ensure that garbage and leaves are not burned by people in the open, as was directed by the National Green Tribunal, and directed the city administration to publicize in print, audio and visual media that such practices are prohibited.

Shocking revelations by a IIT Kanpur and CPCB Study:

The study also revealed that road dust, burning of biomass, industrial stacks, and municipal solid waste contributed a greater share in the city's air pollution, as compared to pollution due to vehicular emission.

Particulate matter levels, both PM 2.5 and PM 10, received major contributions from road dust. While 56% of all PM 10 pollution was due to road dust; around 38% PM 2.5 pollution was also due to road dust.

Interestingly, vehicular pollution too contributed 9 to 20% of the particulate matter pollution. Other important factors were biomass burning (17 to 26%), incineration of municipal solid waste (6 to 7%), and secondary particulate matter (settling between 25 to 30%).

Major Categories of Pollution	Percentage
Hotel / Restaurants	3%
Industrial	14%
Domestic Sources	12%
MSW Burning	3%
Concrete Batching	8%
Vehicular pollution	20%
Diesel Genset	2%
Road dust	38%
Crenation	1%
Others	2%

Why was it necessary to do this survey?

It was necessary to do this survey during Odd Even phase 2.0 because a perception was being created that people of Delhi are happy with the scheme and want it

permanently. 'Dilli bole dil se, Odd Even phir se'. Perhaps were people were willing to suffer if there was a real change in pollution due to this policy and reduction in traffic congestions. But, as all reports and studies have unanimously found that the Odd Even scheme has had no effect on pollution but has in fact instead increased PM2.5 levels. If the scheme was indeed so popular then what was the need of a 100cr publicity budget for the scheme?

Odd Even phase 1.0 was probably relatively reasonably convenient for people because schools had holidays then and because it was trial phase and people adjusted and did not end up buying more vehicles and thus there was traffic decongestion. Moreover, people wanted a second phase of Odd Even because people thought that having learnt its lessons from phase 1, the government would come with more preparedness in the second phase i.e. more buses as promised will actually ply on the roads, other measures to curb pollution like road vacuuming, planting trees will also be taken alongside the road - rationing scheme. But, instead what the public got was excuses in terms of ineffective implementation of the scheme such as auto strikes, burning of landfill sites, breaking down of buses etc. Such excuses in addition to manipulating facts and statistics on pollution is a signal to the people that even the Delhi government feels that this scheme is losing popularity.

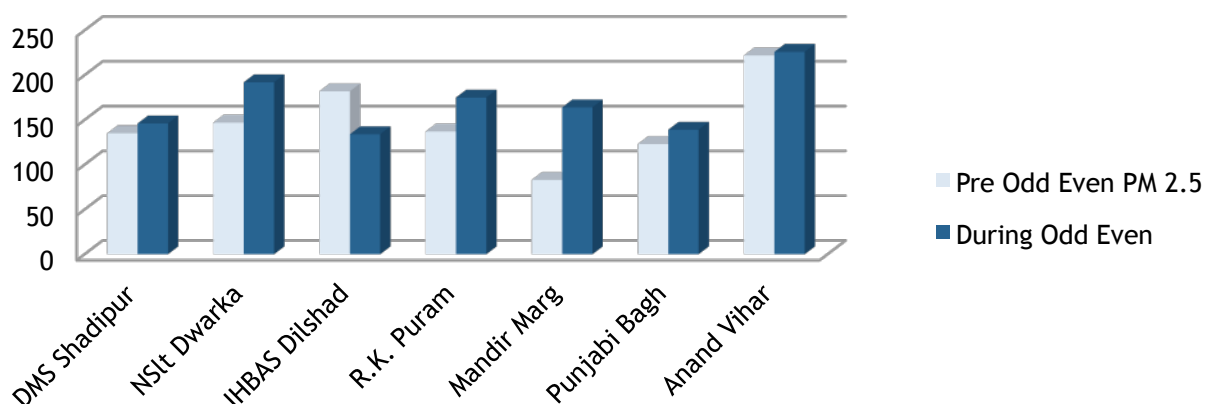
Furthermore, the initial survey done by the Delhi government was a highly biased sample and thus cannot be taken at face value and is passed off as "public opinion". Hence, it was necessary to do this survey and ask real commuters so that the fact of the matter can come out.

Delhi Air Quality Profile Pre and Post Odd Even (Data as recorded by Central Pollution Control Board)






International Standard for Air Quality Index (Pollution Levels)

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101-150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151-200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201-300	Health alert: everyone may experience more serious health effects.
Hazardous	> 300	Health warnings of emergency conditions. The entire population is more likely to be affected.

PM 2.5 Levels Pre Odd Even (1 - 14th April) and During Odd Even (15th -26th April) - Data by CPCB



Interesting anecdotes and stories that emerged from interactions with people:

-  A female student labelled the scheme as failed as “pollution has increased, traffic hasn’t decreased and even auto drivers are over charging.” The student also answered “yes” to the last question that asked whether she wants the scheme to be a permanent feature. Hence, we asked her why does she want it permanently despite it being a failed scheme according to her? To which the girl answered that instead of a 15-15 day hassle, it was better to adjust life according to the scheme if it is implemented permanently.
-  One respondent demanded that having a driver is not a luxury for him but a necessity and he has to cut corners for the driver’s salary, and hence consequently demanded that whether Kejriwal will contribute a 30-day driver salary to him?
-  One middle-aged man demanded the refund of 15% of Road Tax that he has paid in advance to the government to use public services that he cannot use anymore?
-  One commuter was really frustrated with over crowding of the already crowded metros on certain routes and said he has to suffer despite him not owning a car and thus not contributing to pollution nor traffic congestion. But, he was happy to do his bit.
-  One surveyor asked a respondent who owns a 2 wheeler that what is his opinion on two wheelers being soon removed from the exemption list as 2 wheelers cause the most pollution in vehicles. To this charge the respondent replied that

he voted for Kejriwal and we are a major voter base for him and thus the CM wont have the guts to do so.

- + One commuter who uses the services of Ola and Uber frequently complained that the edge of this mode of transport was lost as she had suffered from surge pricing and later in the scheme could not rely on them as there weren't any cabs available on most times of the day.
- + One respondent complained of waiting 20mins at a metro station during the scheme.
- + One car owner and a scooter owner had a bought a second hand car and scooter respectively to beat the odds of the scheme.
- + One guy supported odd even scheme vehemently but was desperate to see other measures to curb pollution to be taken.

Survey Results and Analysis

Total sample: 4788

Types of respondents: commuters who use metro, car, two wheelers and buses as their chief mode of transport

Total teams deployed: 14







Following locations surveyed:





1	Rajiv Chowk Metro station
2	Peeragadhi Chowk
3	Patel Nagar (East- West)

4	Central Market Lajpat Nagar
5	Delhi - Noida Border
6	Saket Metro Station
7	Bhajanpura
8	Madhuban Chowk
9	Durgapuri Chowk
10	Nangloi
11	M Block, Greater Kailash 1
12	Dr. Munje Chowk Pahadganj
13	Shashtri Nagar Chowk


Key Findings

- ✚ The survey findings suggest that the odd even scheme of the state government in Delhi has not found favour with the people of Delhi as the respondents were highly critical of not only the way it was implemented but also of its conception to achieve the objective.
- ✚ Around 2/3rd of the respondents rejected the scheme terming it as failure. Even 31% of those who said that the odd even scheme is successful did not want it to continue as a permanent feature.
- ✚ The scheme has been a complete failure as is evident from the fact that an equally high proportion of respondents (71 %) didn't want this scheme to continue any more.
- ✚ 88% of the respondents covered in the survey decried the high expenses incurred on the publicity of the scheme.

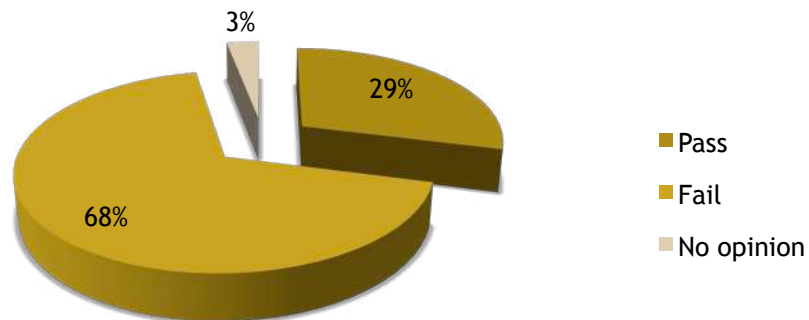
-  78% of them held that the Kejriwal govt. was ill prepared or underprepared to implement the scheme
-  As for harassment faced by the people on account of the odd/even scheme, 3/4th of those covered in the survey mentioned that they were harassed by the scheme.
-  This is further corroborated by the fact that a vast majority of the respondents 76% failed to use car pool during the scheme and around similar proportion maintained that the availability of transport services did not match the need arising from the scheme.
-  55% of the respondents were in the age group of 18-24 and 62% of them termed the scheme as a failure.
-  It is interesting to note the opinion of those who want it to continue as become a permanent feature - 22 % of this category felt that there was no decrease in pollution and a significant proportion (38 %) were not satisfied with the service of public transport during the event.
-  In brief, poor thought behind the scheme and its long run implications, ill preparedness of its implementation, poor availability of public transport and impracticability of advisory about car-pooling contributed to the failure the scheme. As 76% of the respondents did not carpool during the scheme, we assume that they either reduced their travel or had to shell out extra expenses on auto and cabs. This is because there has only been slight increase in metro ridership and buses were empty as admitted by the Delhi government itself.

-  The high expense on its publicity has been vehemently resented by the people; due to the improper utilization of public funds.
-  A whooping majority of 73 % of those who passed the odd even scheme held that the expenses on the publicity are unjustified.
-  Around the same proportion of respondents (72 %) of those who passed the scheme maintained that there was no decrease in pollution during the 15 days of odd even scheme.
-  Even higher proportion (79 %) of those who passed the scheme said that the traffic volume was as it use to be.

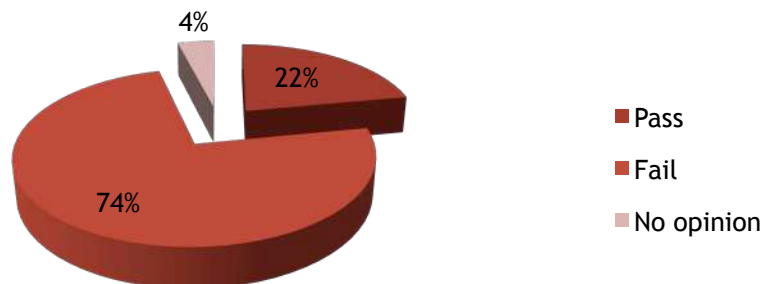
Results

-  **Odd Even Result:** This question captured the overall sense of the person surveyed on his/her opinion in totality of the implementation of the scheme and their individual view of the various aspects of the scheme.

Q1 - Odd Even Scheme Pass or Fail

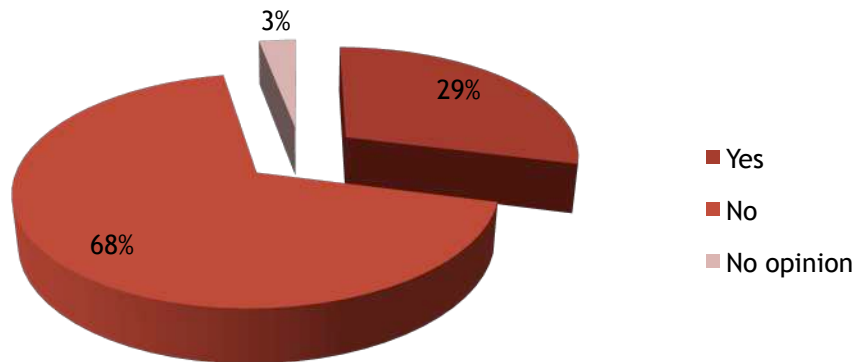


Q1 - Odd Even Scheme Pass or Fail (without two wheelers)



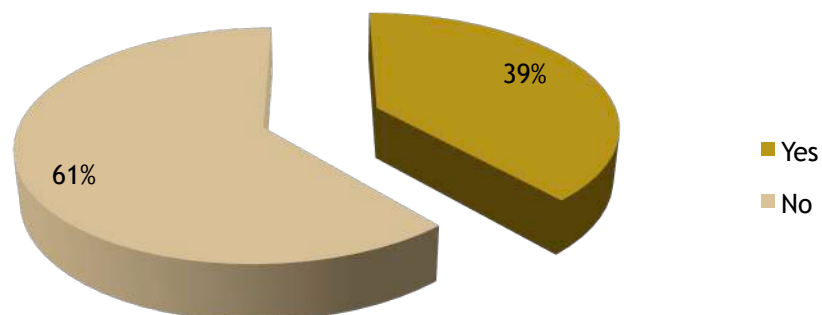
Decrease in Pollution: This is a crucial question to judge whether the public is aware about the pollution levels pre and post the scheme because according to the data pollution levels haven't decreased but have rather increased on many measures.

Q2 - Decrease in Pollution

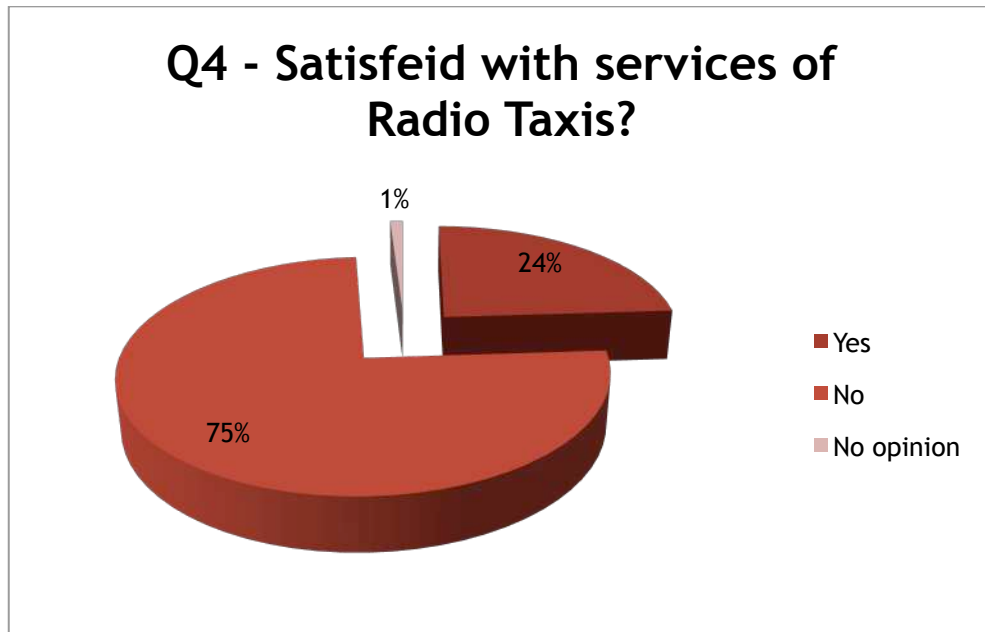


Decrease in Traffic: This question was to judge the whether during this Odd Even phase people felt traffic had decreased in comparison to the times when the scheme is not in place. As it asked all kinds of commuters it encapsulated traffic congestion in the larger sense on all major hubs of the city.

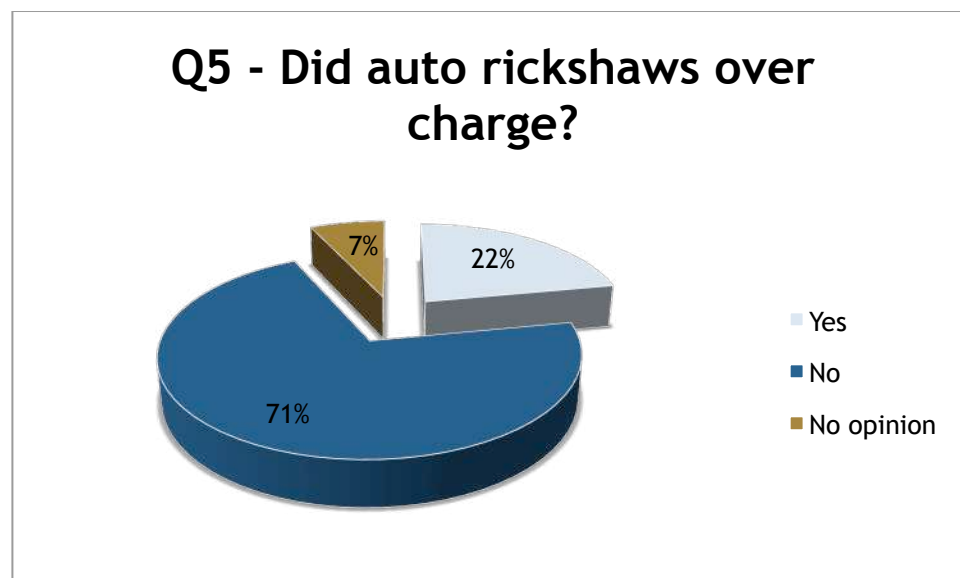
Q3 - Decrease in Traffic



- ✚ **Satisfied with services of Radio Taxi Co:** Post the ban on surge pricing, commuters faced a lot of trouble as there were no cabs available even during off peak times

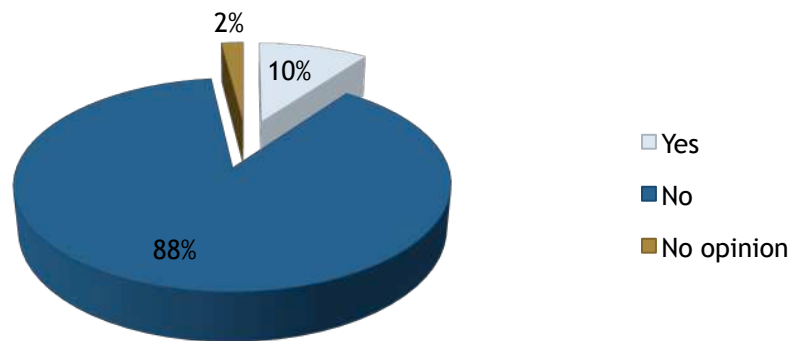


- ✚ **Did auto rickshaws over charge?:** Despite the rule of going by the meter, it is an informal norm to price a rickshaw journey according to the demand and supply at the moment. Hence, we wanted to ask commuters whether they faced overcharging by autos.



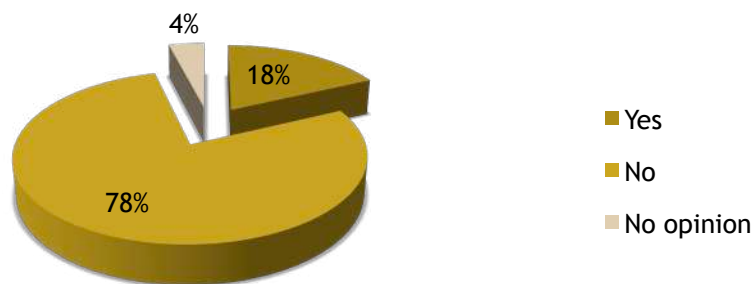
- ✚ **100cr for publicity of scheme justified:** If the scheme was as popular as claimed by the Delhi government, we wanted to know from the people that if an amount of 100cr for the publicity and information campaign was justified

Q6 - 100 crore spent on publicity of scheme justified



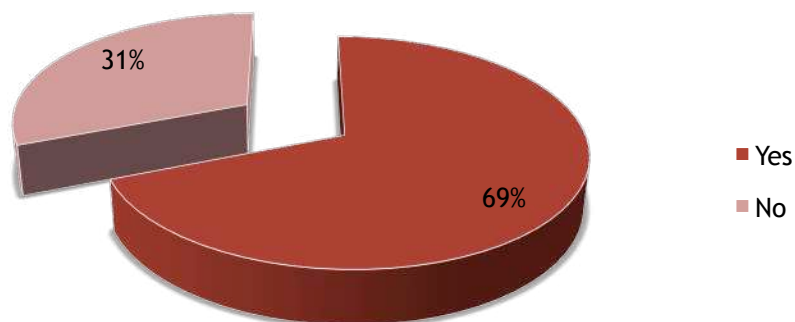
- ✚ **Did Kejriwal govt. have enough preparedness to implement:** The fact that there were no school holidays and the buses promised did not surface on ground and people were resistant to use to the metro due to lack of last mile connectivity, this question asked the people whether in terms of security and other measures that should be taken by the government was there enough preparedness

Q7 - Did Kejriwal have enough preparedness to implement the scheme



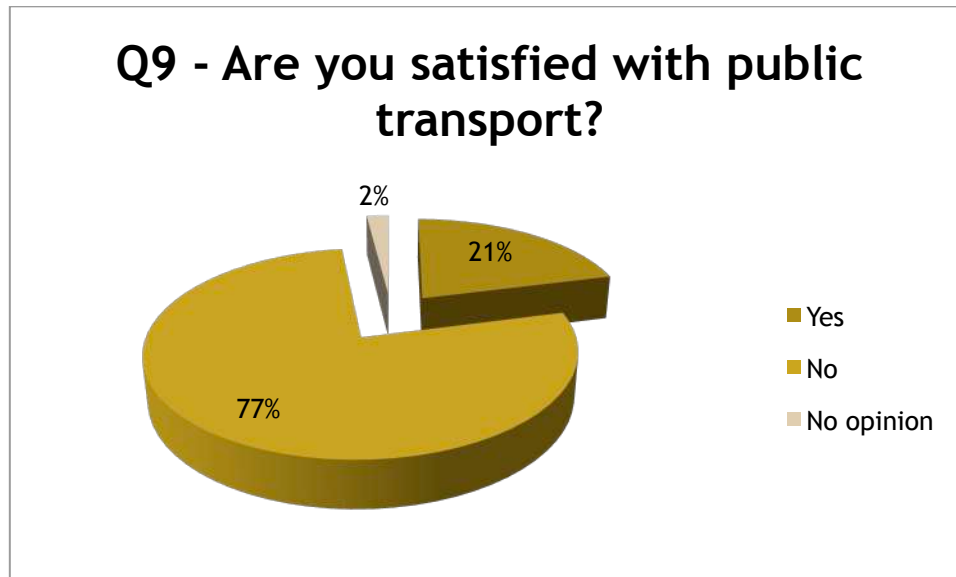
Did you face harassment?: This is a broad question, and harassment could be anything from paying a ridiculously high fine, to standing in long metro queues or using an overly crowded bus.

Q8 - Did you face harassment

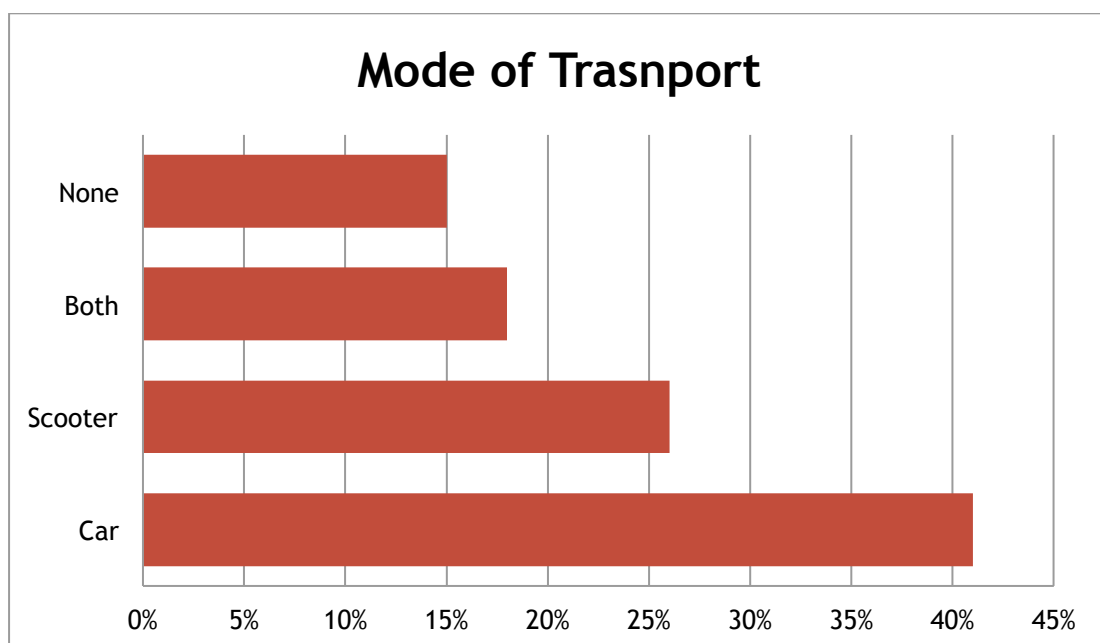


Are you satisfied with public transport?: During the odd even scheme, there is obviously pressure on the existing infrastructure of public transport especially

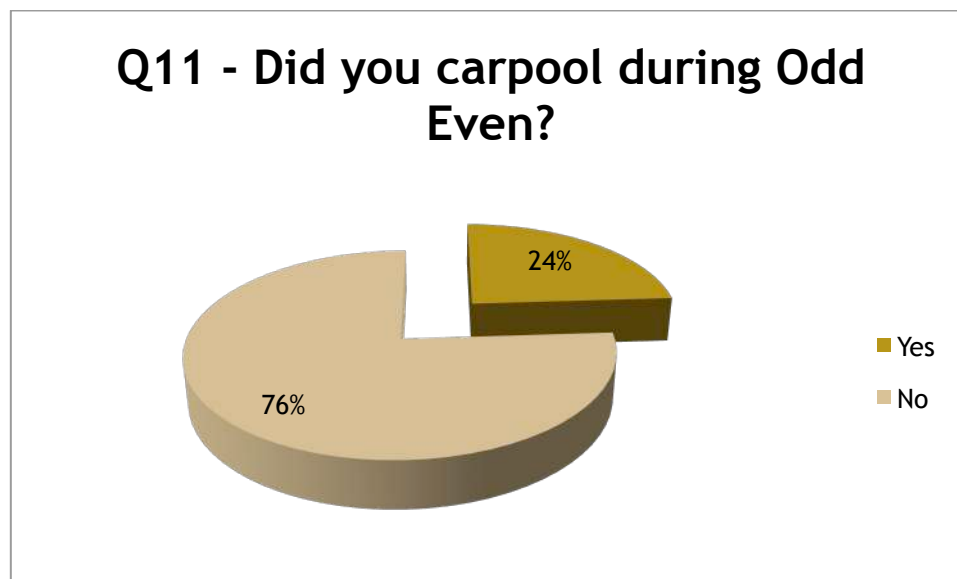
buses and metro. So this question captures an overall view of the experience of the commuters who use public transport services.



Mode of Transport: This question encapsulates the demographics of the respondents which showcases the impact on each category of commuters

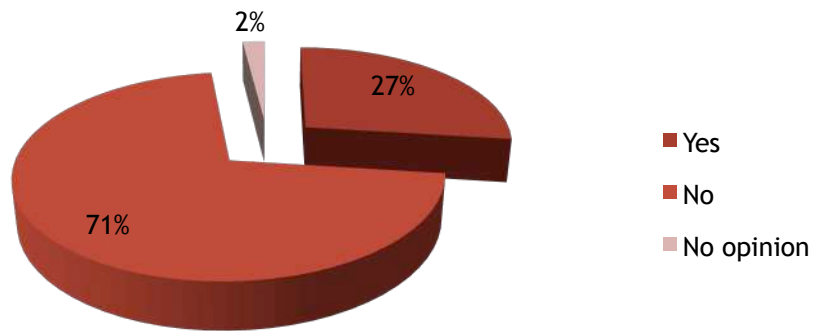


- ✚ **Did you carpool during Odd even?:** This question was necessary because as claimed by the Delhi government, the scheme was labeled a success because people car - pooled, so we wanted to see whether people actually car pooled or were forced to either not commute or shell out extra expensed to ride on autos and taxis.



- ✚ **Do you want Odd Even again:** This question is the one biggest signal of whether the public due to various factors wants the scheme again or not.

Do you want Odd Even scheme to be implemented permanently?



लोक अभियान ऑड-इवन स्कीम – सर्वे फॉर्म

- | | | |
|---|---------------------------------|-------------------------------|
| 1. क्या ऑड-इवन सफल है ? | पास <input type="checkbox"/> | फेल <input type="checkbox"/> |
| 2. क्या प्रदूषण कम हुआ ? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 3. क्या ट्रैफिक जाम कम हुआ ? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 4. रेडियो टैक्सी कंपनी की सर्विस से आप संतुष्ट हैं ? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 5. क्या ऑटो रिक्शा वाले मनमानी करते हैं? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 6. विज्ञापन पर करोड़ों रुपया खर्च करना क्या ठीक है ? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 7. क्या केजरीवाल सरकार ने इस योजना को लागू करने के लिए पर्याप्त तैयारी की थी? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 8. क्या ऑड इवन से आपको काम का नुकसान हुआ ? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 9. क्या आप पब्लिक ट्रांसपोर्ट से संतुष्ट हैं ? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 10. कार हैं या स्कूटर – कितने हैं ? | स्कूटर <input type="checkbox"/> | कार <input type="checkbox"/> |
| 11. ऑड-इवन स्कीम के दौरान क्या आपने कारपूल की ? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |
| 12. क्या आप ऑड-इवन स्कीम हमेशा के लिए चाहते हैं? | हां <input type="checkbox"/> | नहीं <input type="checkbox"/> |

नाम :

आयु : मोबाइल :