How traffic flow affects travel time in metros

Peak hour traffic in Mumbai and Delhi increases commuting time by around 70% to 100% along some popular routes, shows data

feedback@livemint.com MUMBAI

eak hour traffic in major Indian cities almost doubles the travel time along some popular routes, reveals data from Uber Movement, which provides anonymised, collated data of rides on its platform (ubr.to/2HZSzTn). The data also reveals that traffic is often skewed in one direction during a particular time of the day. reflecting that economic activ ity is often concentrated in a few parts of city.

Consider the time taken to commute from the suburbs to the city centre in Mumbai and Delhi. Average travel time during morning peak hour—from 7am to 10am—on a typical weekday is considerably higher than time taken during lean hours—midnight to 7am—along the same route. In case of Mumbai's Western Express Highway (WEH), travelling from the suburb of Borivali to Parel, an important commercial hub, takes almost double the time during peak hours compared to lean hours. The metro construction

workalong the WEH may have exacerbated traffic congestion between January and March 2018. However, the situation was bad even a year ago, when the peak hour commute took 80% longer than travelling during the lean hour.

In Delhi, the addition to travel time was 77% along the Gurugram to Delhi highway. (See Chart 1)

The direction of travel also often makes a difference. In Mumbai, the traffic flow is

III MINT GRAPHITI

Traffic almost doubles the travel time along major routes in Mumbai and Delhi

Lean hours (12 midnight to 7am) Peak hours (7am-10am) Mumbai: Suburb to city centre Western Express Highway Eastern Express Highway

Gurugram-Delhi 23.51

Noida-Delhi 13.82 23.22

Traffic in peak hours is often skewed in one particular direction

Travel time in minutes



Data refers to average of weekdays from 1 Jan 2018 to 31 March 2018. Western Express Highway route refers to Borivali East-to-Parel route while Eastern Express Highway refers to Mulund East to-Parel. Gurugram-Delhi route refers to travel time from IGI Airport (T3) to Connaught Place (CP); Nolda-Delhi route refers to Mayur Vihar Phase 1 Extension to CP.

Mulund

2018

urb) rather than the other

This suggests that the con-

centration of eco-

nomic activity in

a few hubs is

more acute in Mumbai com-

pared to Delhi.

(See Chart 2)

There are also seasonal patterns at play. For

Mumbai: Traffic worsens during monsoon months; May tends to be a relatively light month 90 Parel East

overwhelmingly skewed in

one direction from the sub-

urbs to the city centre in morn

Connaught Place towards

Gurugram, (city centre to sub-

ing and vice-

versa in the even-ing. However, in

the case of Delhi, this is more

mixed, with mar-

ginally more traf

fic flowing from

UAF India Singapore Pakistan South Africa 73 60 57

Indians spend relatively higher time in commute

Based on a survey of 43,034 people across 52 countries in 2017 by Dalia Research. Data includes all modes of transport, including bus and train.

months of July and August are

particularly bad in both Mum-

bai and Delhi. May appears to be a traffic-light month in

Mumbai, which is also the time when most schools close down

for summer holidays. A similar effect is visible in

Delhi in June, at least for the

selected routes examined by

Analysis also suggests that

average travel time in both the

Mint. (See Chart 3)

cities increased between January 2016 and March 2018, the entire period for which Uber provides data.

However, the evidence is not conclusive as an increase was not witnessed along all the routes,

Nevertheless, several other studies point towards a deteriorating situation of traffic in India's major cities. A study by Neema Davis and other Distance from suburbs to city centres MUMBAI



researchers from IIT Madras (bit.ly/2tj55Iw) found that average speed of taxis in New Delhi reduced from 34.2 kilometres per hour (kmph) to 33.6kmph over the course of Chart 4) 2013. Their research sug-Thus, there is an urgent gested that increased conges-tion was the culprit behind

> The concentration of economic activity in a few hubs is more acute in Mumbai when compared with New Delhi

state of worsen-ing traffic and attributed it mainly to an increase in the number of privately-owned vehicles. The report's analysis, using Global Positioning System (GPS) showed that average journey traffic. speed along major routes in Mumbai is only 20kmph during morning peak hours, com-pared to off-peak period aver-age of 27 kmph

age of (bit.ly/2M2fLTr). The spectre of deteriorating traffic congestion in cities

should worry us, as the time

www.evotingindia.com.

Particulars
Date of completion of dispatch of Notice
Date and time of commencement of remote e-voting
Date and time of end of remote e-voting

slowing speeds. Similarly

Municipal Corpo-ration of Greater

Mumbai's Com-prehensive

Mobility Plan (CMP) released in

2016, expressed concerns over the

mute is already among the highest in the world, according to a recent survey by Dalia research (bit,ly/2lj3xKL). (See

need to improve traffic management in India's cities. Measures such as introducing dedicated bus

corridors encouraging ride-sharing among commuters can be some of the useful quick fixes for the situation. However, a more long-term solution is likely

to involve greater investment in mass rapid transit systems or metro, a theme we will explore in the second part of this series on metropolitan

Arjun Srinivas is a fellow, working with Mint as part of the Hindustan Times-Mint-How India Lives Data Journalism Fellowship (bit.ly/2JQzJUL)

This is the first of a two-part data journalism series on metropolitan traffic in India.

INOX WIND LIMITED

BOOK CLOSURE AND REMOTE E-VOTING INFORMATION Notice is hereby given to all persons and in particular to those Members of the Company who have no registered address in India and have not supplied to the Company any address within India for giving Notices to them under Section 20 of the Companies Act, 2013 read with Regulation 47 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (Listing Regulations) that the Company

bulgations and Disclosure Acquirements, a regulation, 2015 (Listing negulations) that the Company has posted Notice either in physical or electronic mode in respect of 9th Annual General Meeting (AGM) of the Company scheduled to be held on Thursday, the 12th July, 2018 at 11.00 A.M. at Hotel Pandit Moolraj Residency, SH-25, Una-Nangal Road, Rakkar Colony, District Una-174303, Himachal Pradest, India, containing details of business to be transacted at the Annual General Meeting in terms of the Notice posted to Members. The Notice alongwith Annual Report is available on website of the Company, www.inoxwind.com and on Central Depository Services (India) Limited (CDSL) website,

www.evotingindia.com.

Notice is hereby also given under Section 91 of the Companies Act, 2013 read with Rule 10 of the Companies (Management and Administration) Rules, 2014 and Regulation 42 of the Listing Regulations, that the Register of Members and Share Transfer Books of the Company will remain closed from Friday, the 6th July, 2018 to Thursday, the 12th July, 2018 (both days inclusive) for the purpose of reconciliation of Shareholders Account in the Register of Members of the Company prior to the AGM.

The Company has provided e-voting facility to all Members, holding shares either in physical form or dematerialized form, as on the Cut-off Date i.e. Thursday, the 5th July, 2018 through the remote e-voting institutes of CSSI in second of Beachings to be presented the AGM.

platform of CDSL in respect of Resolutions to be passed at the AGM. All Members are requested to note following schedule of voting including e-voting:

Particulars Date
Date of completion of dispatch of Notice 18" June, 2018
Date and time of commencement of remote e-voting 9" July, 2018 at 9.00 A.M.
Date and time of end of remote e-voting 11" July, 2018 at 5.00 P.M.
Date of declaration of result 13" July, 2018
The procedure and instructions for e-voting has been given in Note No. 7 of the Notice. Person who becomes

Member of the Company after the dispatch of Notice may follow the same instructions for e-voting as mentioned in Note No. 7 of the Notice. The Members who have cast their vote by e-voting may attend the meeting but shall not be entitled to cast their vote again. Vote once cast by the Member shall not be allowed to be changed subsequently.

The facility for voting through Polling Paper shall be made available at the AGM to the Members who have

not cast their vote through e-voting and are present in the AGM. Voting rights (for voting through e-voting and are present in the AGM of the Methods with the Pall of the Voting rights (for voting through e-voting as well as Polling Paper at AGM) shall be reckoned on the paid up value of the shares registered in the name of the Members of the Company as on Cut-off Date. Member having any grievances connected with facility for voting by electronic means may contact Shri Rakesh Dalvi, Manager of CDSL, A Wing, 25th Floor, Marathon Futurex, Mafatlal Mill Compounds, N.M. Joshi Marg, Lower Parel (E), Mumbai-400013; Phone No.1800225533, Email ID helpdesk.evoting@cfellindie.com

Kindly note that the e-voting shall be disabled by CDSL beyond the date and time specified in the above

NOTE: A Member entitled to attend the meeting and vote thereat is entitled to appoint a proxy to attend and vote instead of himself and the proxy need not be a Member. Duly executed proxies must be registered with the Company not later than 48 hours before the scheduled time of the meeting.

(CIN: L31901HP2009PLC031083)

red Office: Plot No. 1, Khasra Nos. 264 to 267, Industrial Area, Village Basal -174303,
District Una, Himachal Pradesh, India: Telephone / Fax: +91 1975-272001

Website: www.inoxwind.com, E-mail: investors.iwl@inoxwind.com
NOTICE FOR 9™ ANNUAL GENERAL MEETING,



The govt plans to set up at least 5GW of offshore wind

India aims to add 30GW of offshore wind plants by 2030

Utpal Bhaskar utpal.b@livemint.com NEW DELHI

 he ministry of new and renewable energy (MNRE) on Tuesday announced the country's longterm target of adding 30 giga watts (GW) of offshore wind energy projects by 2030. This comes in the backdrop

of India calling for expression of interest (EoI) for the first offshore wind energy project in the country being set up in the Gulf of Khambat, off the Gujarat coast. While the first project is of 1,000 megawatts (MW), the government's plan is to set up at least 5GW of off-shore wind capacity by 2022.

This assumes significance as India, the biggest emitter of greenhouse gases after the US and China, plans to leverage scale to bring down offshore energy tariffs by harnessing the enormous wind power potential along its 7,600km coastline.

To give confidence to the wind industry, the ministry has a declared medium and long-term target for offshore wind power capacity additions, which are 5 GW by 2022 and 30 GW by 2030," the government said.

क .60/न.पा.नि./संघारण शाखा/2018-19
क .60/न.पा.नि./संघारण शाखा/2018-19
क .60/न.पा.नि./संघारण शाखा/2018-19
कार पालिक निगम, बिलासपुर के संघारण शाखा अंतर्गत शहर के विभिन्न स्थानों में स्थित रोड डेबाईडर में सींत्यींकरण कार्य हेतु संशोधित हूं निविदा क्रमांक 41, दिनांक 08/06/2018 को सेस्टम टेन्डर नम्बर 37370, 37371, 37372, 37373, 37374 एवं पन आई रो 40-4, 40-1, 40-3, 40-2, 40-5 अमंत्रित की गई थी, रित्ते प्रशासकीय कारणीं से निरस्त किया जाता है।

🌎 गाजियाबाद नगर निगम अति अल्पकालीन निविदा सूचना

direction.

NIT No.: 06/EE(PB)/DTTDC/Engg./2018-19, Name of Work: Construction of Additional Class Room 4 Nos. for Primary Section at SKV C-Block at Sultan Puri, (ID No. 1412026), Delhi. (Sht. Civil & Electrical Work), Estimated Cost: Rs. 97,64,450/-, (Civil Work: Rs. 94,63,981 & Elect. Work Rs. 3,00,469), Earnest Money: Rs. 1,95,289/-, Period of Completion : 120 Days, Last time and date of submission of bid: 03:00 PM on 25.06.2018. Tender ID No.: 2018_DTTDC_153198_1, Further details and Terms & Conditions can be seen at https://gov/procurement/delhi.gov/in Conditions can be seen at https://govtprocurement.delhi.gov.in



luman Nesource Audit (HRAUdit) in FCI he Bid document and other defails smm & conditions can be download, e.f. 2.0.06.2018 from Centr procurement. Portal (https://eprocur ov.ln/eprocure/app) and FCI webs in 11:00 AM on 20.06.2018 and ends 10.00 PM on 11.07.2018.

PM on 11.07.2018. General Manage राष्ट्र के खाद सुरक्षा प्रहरी



ग्रीलिखित कार्यों के निष्पादन हेतु अनुमव प्राप्त फर्मों से निविदायें 29.06.2018 को आमंत्रित | जाती है, निविदा प्रपत्र दिमांक 26.06.2018 से दिनांक 28.06.2018 तक किसी मी व्यंदिवस में 10.00 बज़े से 04.00 बज़े तक नजारत विमाग में निर्धारित टैण्डर मूल्य जमा कर् ग़प्त किये जा सकते हैं। जो दिनांक 29.06.2018 को साथ 03.00 बजे तक अधी र्पालय में रखे निविदा बॉक्स में डाले जायेगे, जो उसी दिन दिनांक 29.06.2018 को सायं 4 00 बजे उपस्थित निविदादाताओं व अधोहस्ताक्षरी के समक्ष कार्यालय में खोले जायेंगे । घरोहर राशि एक.डी.आर / ड्राम्ट लेखाधिकारी नगर निगम गाजियाबाद के नाम बंधक होगी। यदि निर्धारित तिथि को किसी कारणवश अवकाश हो जाता है तो निविदायें अगले कार्यदिवस में जायेगी। टैण्डर को बिना कारण बताये निरस्त करने का अधिकार नगर आयुक्त अनुमानित घरोहर निविदा कार्य की

đ.,	702.000002	सारा	राशि	मूल्य	अवधि
नव 03	जियाबाद नगर निगम मुख्यालय रयुग मार्किट में लगी लिपट नं0 की नवीनीकरण/आधुनिकरण । कार्य।	8,57,830.00	1 10 10 10 10 10 10 10 10 10 10 10 10 10	1,000 + जी.एस.टी अतिरिक्त	
03 का	की नवीनीकरण/आधुनिकरण				



ग सकती है।

भारतीय रिजर्व बैंक RESERVE BANK OF INDIA www.rbi.org.in

अपर नगर आयुक्त

GOI ANNOUNCES SALE OF FIVE DATED SECURITIES FOR ₹ 12,000 CRORE ON JUNE 22, 2018

The Government of India (GoI) has announced to sale (issue issue) five dated securities: Sr. Nomenclature Notified amount Earmarked for Retail Nominal (in ₹ Crore) Investors* (in ₹ Crore 6.65% GS 2020 2,000 2 7.59% GS 2026 3,000 3 GOI FRB 2031 3,000 5 7.06% GS 2046

2,000 Subject to the limit of ₹ 12,000 Crore, being total notified amount, Gol will have the option to retain additional subscription up to ₹ 1,000 Crore against any of the above securities.

The auctions will be conducted using multiple price method by RBI, Mumbai Office, Fort, Mumbai on June 22, 2018 (Friday). The result will be announced on the same day and payment by bidders will have to be made on June 25, 2018 (Monday) For further details, please see RBI press release dated June 18, 2018 on RBI website - (www.rbi.org.in).

Attention Retail Investors

(*PFs, Trusts, RRBs, Cooperative Banks, NBFCs, Corporates, HUFs and Individuals)

Retail investors can participate in the auctions for the amounts earmarked for them on a non-competitive basis through a bank or a primary deater. For more information, detailed list and telephone numbers of primary dealers/bank branches and application forms please visit RBI website (www.rbi.org.in) or FIMMDA website (www.fimmda.org).

Government Stock offers safety, liquidity and attractive returns for long duration.

Don't get cheated by E-mails/SMSs/Calls promising you money

DEVELOPMENT CORPORATION LIMITED (Engineering Wing) NOTICE INVITING E-TENDER

The Executive Engineer (PB), DTTDC Ltd., Prem Bari Pul, Pitampura New Delhi-110088 (Tel.: 011-27321180) invites on behalf of M.D.& C.E.O. DTTDC Ltd., online item rate tenders for the following works:





RESERVE BANK OF INDIA

Engagement of Medical Consultant (MC) Part-Time on contractual basis with fixed hourly remuneration at Reserve Bank of India, New Delhi

Applications are invited from eligible candidates for preparing a panel to fill up 2 (two) vacancies (One reserved for OBC candidate and One Unreserved) of Medical Consultant (MC), Part-Time on contractual basis, with fixed hourly remuneration for dispensary of Reserve Bank of India at its Main Office Building at 6, Sansad Marg, New Delhi - 110 001, and at other premises of the Bank, such as its residential colonies at R.K.Puram and Vasant Vihar in New Delhi. The application should reach the Regional Director, Reserve Bank of India, Human Resource Management Department (Recruitment Section), 6, Sansad Marg, New

दिल्ली विकास प्राधिकरण

गमंत्रित की जाती है। निविदा दस्तावेज 20.06.2018 से दिविप्रा वेबसाइट से डाउनलो

१५) तक है। ।. एनआईटी नं. 16/ईई/स्पोर्ट्स ढिवि2/डीडीए/2018–19, **कार्य का नाम** वेमिन्न स्पोर्ट्स कॉम्प्लैक्सों का उन्नयन। **उपशीर्ष**ः चिल्ला स्पोर्ट्स कॉम्प्लैक्स में खालं

छोड़े गये बोर वैल का पुनः विकास/रि-बोरिंग। अनुमानित लागत : रु. 20,06,324/ धरोहर राशि: रु. 40.126/ – एवं स्वीकृत समय 90 दिन। 2. एनआईटी नं. 22/ईई/स्पोर्ट्स डिवि. 2/डीडीए/2018–19, कार्य का नाम

लस्वा गोल्फ कोर्स का उन्नयन। उपशीर्ष : भलस्वा गोल्फ कोर्स में नाले का निर्माण

अनुमानित लागत : रु. 21,06,585/- घरोहर राशि : रु. 42,132/- एवं स्वीकृत

समय 60 दिन। त्र. एनआईटी नं, 21/ईई/स्पोर्ट्स डिवि. 2/डीडीए/2018–19. कार्य का नाम –वडी। **उपशीर्थ**ः मलस्वा गोल्क कोर्स में कर्य स्टीन एवं पेयर खॉक उपलब्ध करना ए

रगाना। अनुमानित लागत : रु. 21,49,589 / – घरोहर राशि : रु. 42,991 / – ए

टः विस्तृत विवरणों के लिए कृपया वेबसाइट https://eprocure.gov.in/ eprocure

app या www.dda.org.in देखें । ई-टेंडरिंग पर किसी भी प्रकार की सहायता के लिए कृपया संबंधित कार्यालय में या एनआईसी के ई-मेल: email:cppp-nic@nic.in प

म्पर्क करें या 24x7 हेल्पलाइन नं. 0120-4200462, 0120-4001002, 0120-400100

कृपया के DDA ऐप्स पर अपना फीडबैक दें।

NEW DELHI

other details are available at Bank's website: www.rbi.org.in

Eugene E Karthak

IFCI



Website: www.ifciltd.com CIN: L74899DL1993GOI053677

IFCI Ltd. invites bids from experienced and reputed bidders by e-tender process, for printing of Annual Report for FY 2017-18, for which Tender documents can be downloaded from https://ficl.etenders.in (e-tendering portal) or our website https://www.ifciltd.com/ (Tenders-procurement-goods-and-services).

Last date for submission of e-Bids: 12° July, 2018 up to 11:00 hrs.

All corrigendum's/addenda/amendments/time extensions/clarifications etc. to the tender will be hosted on above website(s) only. Bidders should regularly visit the website(s) to

Note: IFCI reserves the right to reject all or any tender wholly or partly without assigning



e-Tender Notice for Annual Report Printing

Sd/-Dy.General Manager (CPD)

एद सी एन | Northern Coalfields Limited (A Miniratna Company) N C L (A subsidiary of Coal India Limited)

For Inox Wind Limited

(Deepak Banga)

Company Secretary

TENDER NOTICE

Open Tenders are invited under e-procurement mode No. (1) GM CSR)/NCL/SGR/18-19/ETN-04 (2) GM(CSR)/NCL/SGR/18-19/ETN-05 both Dt.15.06.2018 TID (1) 2018_NCL_105945_1 (2) 2018_NCL_105950_1for (1) Construction of road from Gurcharwaha Main Road to Ranhore border, Silfori Gram Panchayat, (2) Construction of oad from Chakelwa main road to Mirchadhuri border. Silfori Gran Panchayat, Estimated Cost (In ₹) (1) 2,41,14,965.56 2,16,12,834.97 & Due date of opening on (1) 04.07.2018 (2) 05.07.2018 respectively.

Open Tender is invited under e-procurement mode No. B/Civ/E-Tender. 2018/04/175 Dt. 15.06.2018 for Sanitation and garbage cleaning work o arwani Colony at Bina Project for a period of 02 years. Estimated Cost ₹74,05,274.22 & Due date of opening on 11.07.2018.

Note:- Above tender(s) has/ have been uploaded on website https:// coalindiatenders.nic.in of Coal India Limited (CIL). Al prospective bidders are advised to visit aforesaid website fo participation against the above tender(s). Full details of above tender(s) are also available on websites: "nclcil.in" o "eprocure.gov.in" or "tenders.gov.in".