Bihar Report Cards

बंका जिले का मानवदिवस प्रति पंचायत प्रति दिन

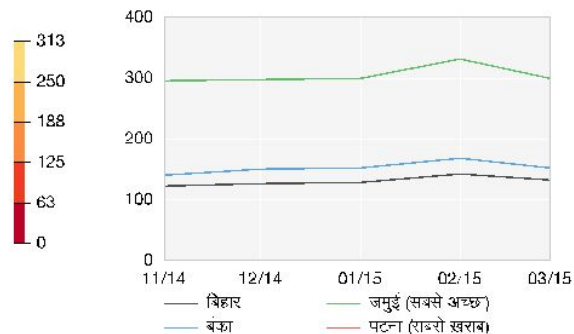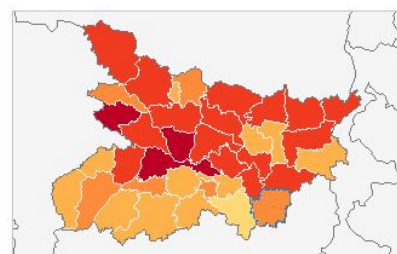| बंका एक नज़र	जिले व्या रैंक	जिले का मान	सबसे खराब ब्लॉक
	15 ● पिछला गहीना: 15	151.5 ↓ पिछला गहीना: 166.2	बाराहाट

जिले का संक्षेप — बिहार के जिलों का मानवदिवस प्रति पंचायत प्रति दिन

बिहार · जमुई (सबसे अच्छा) · बंका · पटना (सबसे खराब)

ब्लॉकों का संक्षेप — मानवदिवस प्रति पंचायत प्रति दिन बंका ब्लॉक्स के लिए

कटोरिया (सबसे अच्छा) · बौंसी (दूसरा सबसे खराब) · बाराहाट (सबसे खराब) · छानन (तीसरा सबसे खराब)
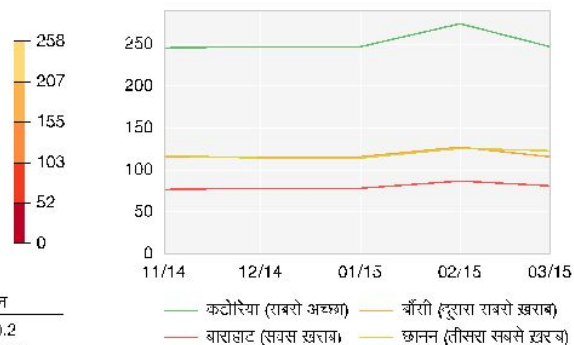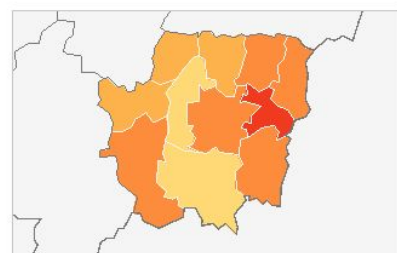
जिले में सबसे खराब प्रदर्शन वाले ब्लॉक्स	राज्य भर में सूचि क्रम	मान
बारहट	382/528	80.2
बौंसी	281/528	115.0
छानन	260/528	121.7

जिले में सबसे खराब प्रदर्शन वाल ग्राम पंचायत	ब्लॉक	राज्य भर में सूचि क्रम	मान
Sondiha north	बागहाट	8529/8529	0.0
Sultanpur	अन्सपुर	7641/8529	7.5
Maldih	शंभूगंज	7401/8529	12.9

2

In India, the Mahatma Gandhi Rural Employment Guarantee (MGNREGA) provides work to around 50 million poor rural Indians every year. MGNREGA is unique among social programs in India for its commitment to collecting and making available detailed administrative data on the daily functioning of the program. However, this data is often presented in confusing or difficult-to-use formats, reducing its ability to enable information feedback loops and positively influence the implementation of the program.

Working with the Bihar Rural Development Department, we developed a set of monthly report cards that we sent out to district and block officials in the state who were tasked with overseeing the administration of MGNREGA. Using a randomized study design, officials either received access to a visualized report card or an Excel sheet containing similar information. We found that officials were more likely to consume visualized material compared to information presented in tables. However, this increased usage did not lead to improved program outcomes.

At left is shown a report card page for Banka district in Bihar for April 2015. This page shows performance on a specific indicator, person-days of work. At top we can see the district's performance rank, rank change, indicator value, and indicator value change, followed by the worst performing block on the district. Below this we see a district-wise map of the state with Banka outlined in blue. To the right, a trendline graph is shown comparing performance over time for this district compared to the state overall and the best and worst districts in the state. At bottom, we see a block-wise map of the district and a trendline graph showing the district's best block and 3 worst blocks over time. Details for the 3 worst blocks and the 3 worst villages in the district are shown in tables at bottom.

Payment Delays Dashboard

In India, the government has moved many social safety net programs from cash or in-kind payments to electronic funds transfer systems. While electronic payments have the potential to reduce leakages, the government still struggles to pay beneficiaries in a timely and consistent manner, reducing the value of government assistance for the country's poorest citizens.

Using data on time to payment collected automatically by the electronic payment system, our team worked with the Indian Ministry of Rural Development to build a dashboard showing the payments process broken down into its different sub-processes over time and across regions, allowing for easy identification of where bottlenecks are occurring and where bureaucrats should focus their attention to speed up payments.

At left is shown a prototype version of the dashboard showing (at top) stacked sub-process durations over time, (at center) individual sub-process durations over time, and (at bottom) stacked sub-process durations over time across sub-regions.
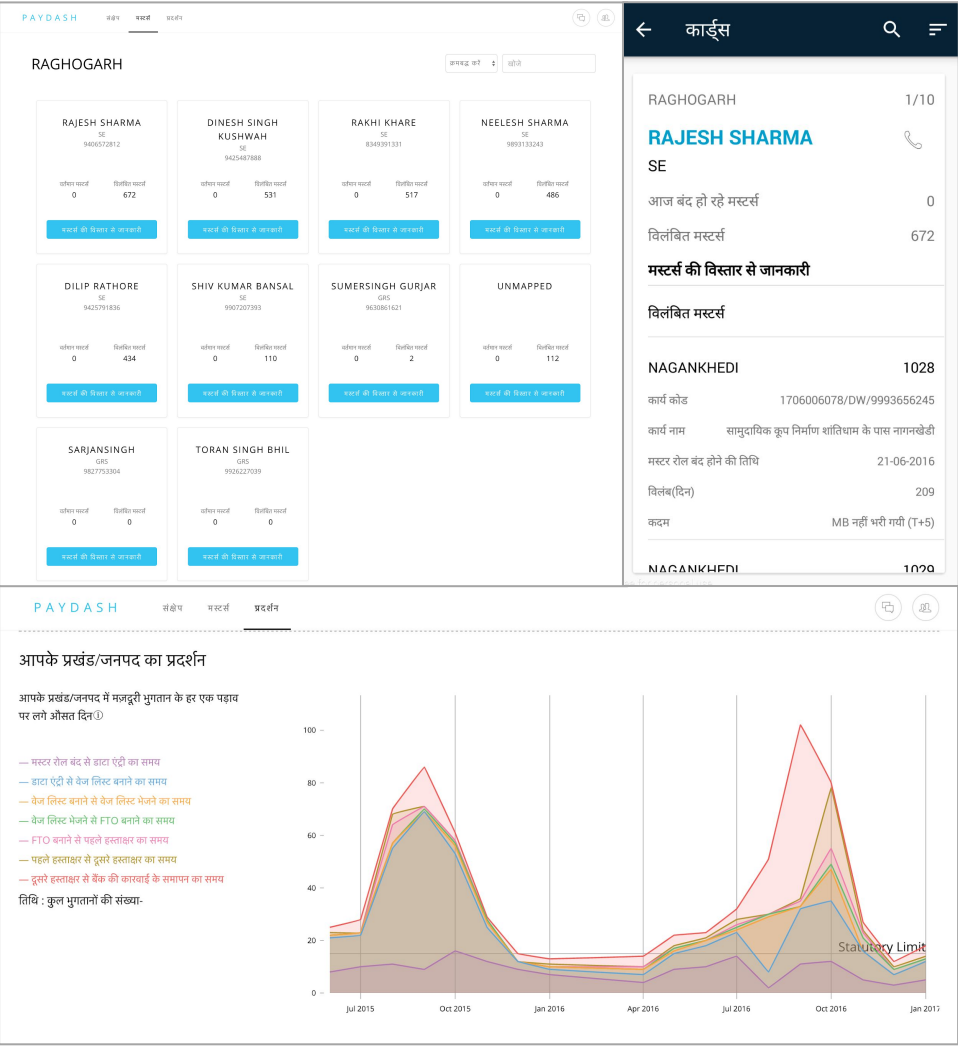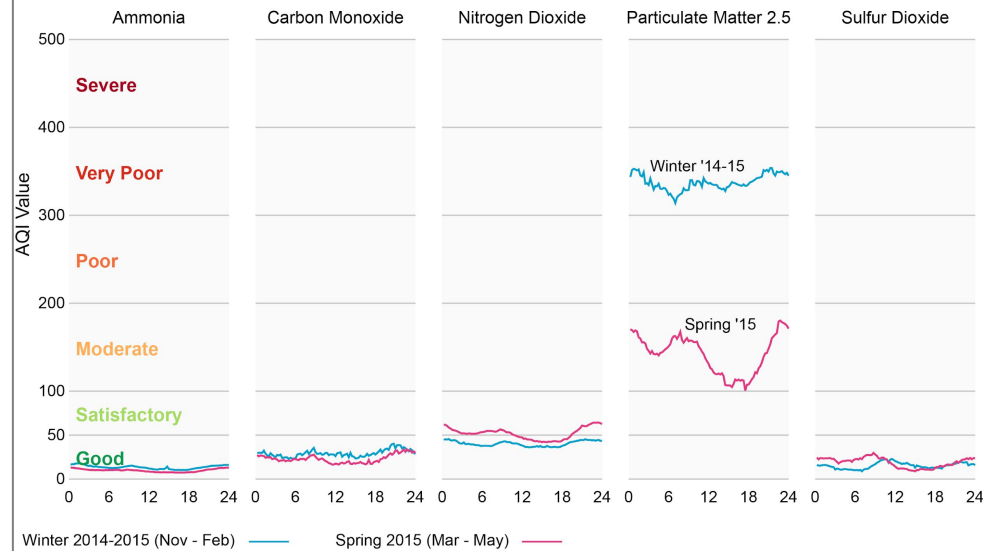
After piloting with potential users, we found that a key action step for officials is to fix accountability for delays with subordinates responsible for carrying out specific sub-processes. For this reason, we eventually moved away from the previous graph-heavy version of the dashboard and began designing an interface focused on making the link between delayed documents and specific subordinates overseen by the user.

At left are shown screens from the final version of the dashboard that is currently rolled out in two states in India. A "card" view has been adopted with each subordinate, their role, contact number, and number of associated documents (both documents coming due and documents past due) shown on each card. The card view is shown for the web app (top left) and for the Android app (top right). The Android app allows the user to swipe through each card and contact the subordinate via phone or Whatsapp by clicking on the phone icon shown on the card. A basic graph view (bottom) showing time to payment over time for stacked sub-processes has been retained from the prototype dashboard.

Environmental Issues in India
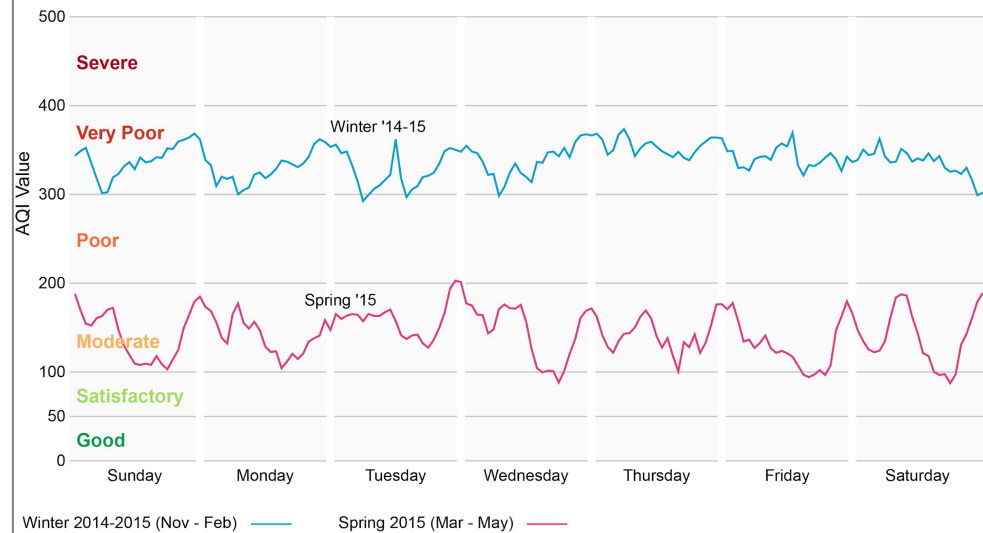
What time of day has the worst air pollution?
Average pollutant levels throughout the day in winter and spring (at Dilshad Garden)

Ammonia | Carbon Monoxide | Nitrogen Dioxide | Particulate Matter 2.5 | Sulfur Dioxide

AQI Value

500 — Severe
400 — Very Poor
300
200 — Moderate
100
50 — Satisfactory
Good

Winter '14-15
Spring '15

Winter 2014-2015 (Nov - Feb) ——   Spring 2015 (Mar - May) ——

Note: Dilshad Garden was chosen due to its reliable coverage of PM2.5 data. Data collection at monitoring stations last winter was generally poor.

What part of the week has the worst air pollution?
Average levels of PM2.5 throughout the week in winter and spring (at Dilshad Garden)

AQI Value

500 — Severe
400 — Very Poor
300 — Poor
200
100 — Moderate
50 — Satisfactory
Good

Winter '14-15
Spring '15

Sunday   Monday   Tuesday   Wednesday   Thursday   Friday   Saturday

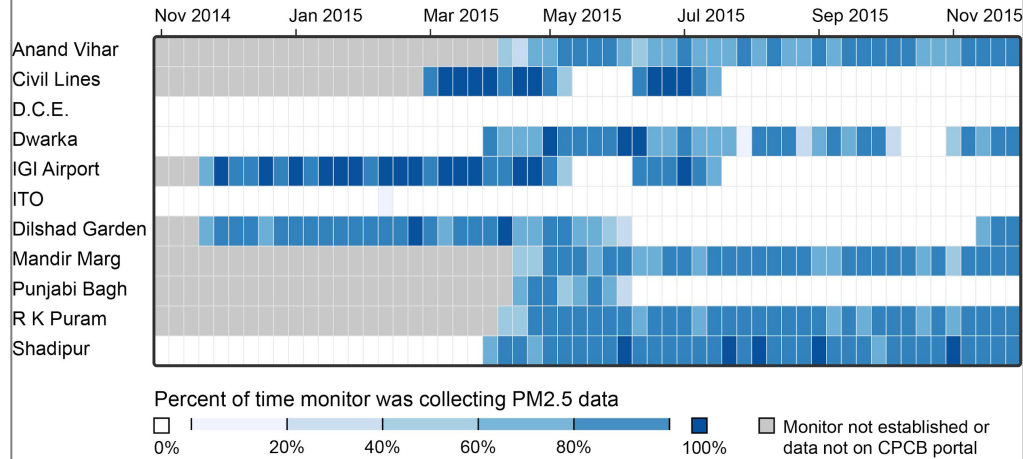Winter 2014-2015 (Nov - Feb) ——   Spring 2015 (Mar - May) ——

Note: Dilshad Garden was chosen due to its reliable coverage of PM2.5 data. Data collection at monitoring stations last winter was generally poor.

Ambient air pollution is a pressing policy challenge across India, and in the capital city of Delhi in particular. While air pollution is high on average, there are important variations in the level of pollution that depend on the time of day and time of year and differ across individual pollutants. This variation can have implications to individuals for when they may choose to expose themselves to outdoor pollution.

Using data scraped from India's Central Pollution Control Board air pollution monitoring portal, we explore these relationships in an article published in Indiaspend, an Indian data journalism outfit.

Are Delhi's air quality monitors working?
Weekly PM2.5 uptime at 11 government monitors around Delhi

Percent of time monitor was collecting PM2.5 data

0% 20% 40% 60% 80% 100%

Monitor not established or data not on CPCB portal

In Delhi, a set of policy debates is raging around how to tackle the city's deadly air pollution problem. However, policymakers and the public still possess poor information about the primary sources of air pollution that could better inform effective policy responses. In addition, the quality of more basic information on the real-time level of pollution across the city is poor.

Using data scraped from India's Central Pollution Control Board air pollution monitoring portal, we examine the implementation of realtime air pollution monitoring in Delhi by analyzing the uptime of pollution monitors across the city. This discussion, highlighting the importance of effective implementation of monitoring systems to inform policy, is published in an article in Indiaspend, an Indian data journalism outfit.
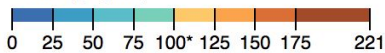
Maharashtra ambient air quality (PM10)
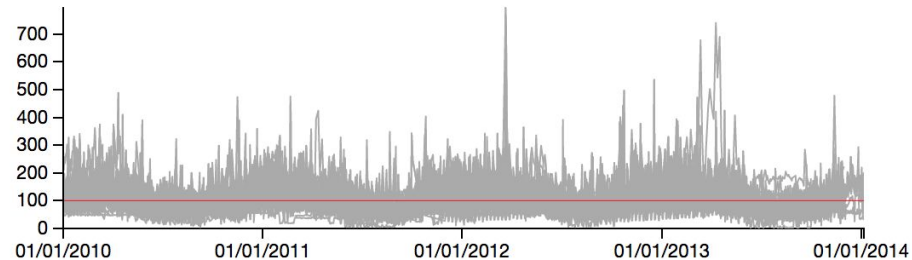Most recent readings for selected cities (24-hour average)

Policymakers require clear, timely information to guide their decision-making. Working with officials at the Maharashtra Pollution Control Board in India's western state of Maharashtra, we experimented with dashboard design that would allow them to easily understand the current picture of air pollution across the state and look at air pollution trends over time. The interactive dashboard shows additional information on readings at each monitoring station when hovering over a dot on the map, as well as highlight the time trend for the given monitor.