



# Behavioral change in the context of COVID-19: districts with the highest contagion rate and bus terminals

## Sponsors:



# BEHAVIORAL PUBLIC POLICY ORGANIZATIONS IN BRAZIL



**What is the Behavioral Science Program?**

**Where are the behavioral public policy organizations in Brazil?**

**ENAP**, the federal school of public administration, and **GNOVA**, its innovation lab.  
2017/ 2018

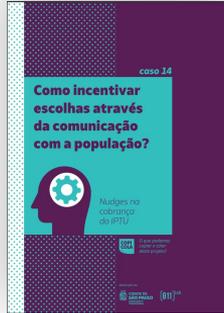
**Nudge Rio**

Rio de Janeiro City Hall's Behavioral Science Unit. Based at Fundação João Goulart, which is part of the Treasury Department.  
2014/2018

**(011).lab**

São Paulo City Hall's innovation in government lab. Based at the Innovation and Technology Department.  
2017/2018

# Behavioral Sciences Program: Awards and Publications



**CopiCola Publishing**  
Guide to Behavioral  
Science Experiments:  
How to Encourage  
Choices Through  
Public  
Communication?



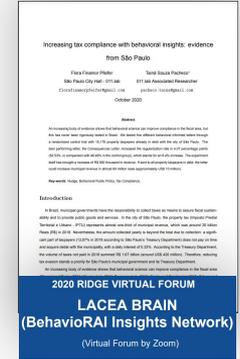
**Evidence Award**  
with the project to  
reduce non-payment  
tax rates using  
behavioral sciences



**InovaCidade Award**  
Recognition by the  
Smart City Business  
America Institute for  
initiatives that  
contribute to  
improving the quality  
of life in cities



**Apolitical Prize**  
In the Citizen-Centred  
Innovation category  
for the use of  
behavioral sciences in  
communicating with  
the population during  
the pandemic.



**Participation in  
congresses with  
cases of behavioral  
sciences**

- LACEA BRAIN 2020
- FGV Behavioral Economics and Finance Meeting

# TO INCENTIVIZE PANDEMIC PREVENTIVE BEHAVIORS

During the pandemic we carried out a project to encourage behaviors necessary for the prevention of COVID-19, **such as the use of masks and staying home.**

For this, **text messages** formulated from insights from the Behavioral Sciences were sent, followed by an impact analysis by **telephone survey** and **behavior observations** at bus terminals.

## Why text messages?

- ✓ Literature shows effectiveness to increase adherence to preventive health behaviors;
- ✓ Easy and fast to test and implement;
- ✓ 96.5% of São Paulo's citizens have a cellphone (PNAD - IBGE, 2015);

# TIMELINE

june.2020

1

5 types of text messages with information and commands for preventive behaviors against COVID-19

2

Impact evaluation by telephone survey

july.2020

3

More effective text messaging for administrative districts with the highest incidence of COVID-19

4

Push notifications in bus terminals

dec.2020

5

Video observations

jan.2021

6

Usage of results to adapt SPTrans communications and campaigns

# TO INCENTIVIZE PANDEMIC PREVENTIVE BEHAVIORS

June.2020

1

**Action:** 5 versions of text messages

**Funds:** SMIT

60.000 people

June.2020

2

**Action:** Impact evaluation by telephone survey

**Funds:** SMIT

7.000 people

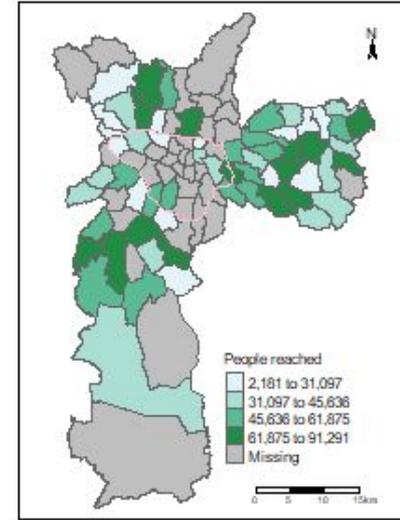
July.2020

3

**Action:** More effective text messaging for districts with the highest incidence of COVID-19

**Funds:** external resources

2.8 million people



# MESSAGES SENT

PREFEITURA DE SAO PAULO: Para evitar a contaminação por coronavírus, **FIQUE EM CASA**. Se for essencial sair use **MASCARA** e mantenha 2 metros de **DISTANCIA**.

## civic duty

PREFEITURA DE SAO PAULO: evitar **MORTES** de familiares e amigos é SEU **DEVER**: ficar na rua coloca os outros em risco: fique em casa.

## social norm

PREFEITURA DE SAO PAULO: milhões de pessoas estão em suas casas para combater o coronavírus. **FAÇA COMO ELAS**: fique em casa.

## reciprocity

PREFEITURA DE SAO PAULO: Profissionais de saúde estão arriscando suas vidas para combater o coronavírus. **FAÇA SUA PARTE PARA AJUDA-LOS**: fique em casa.

## self-efficacy

PREFEITURA DE SAO PAULO: Cada um fazendo sua parte, venceremos o coronavírus. **A SUA AÇÃO IMPORTA**: fique em casa.

## risk perception

PREFEITURA DE SAO PAULO: Pessoas podem estar contaminadas sem saber. **UMA DELAS PODE SER VOCÊ**. Não coloque outros em risco: fique em casa.

PREFEITURA DE SAO PAULO: use máscara de tecido ao sair de casa cobrindo **BOCA** e **NARIZ** e justa ao rosto. Troque quando ficar umida e **LAVE SEMPRE** depois de usar.

## civic duty

PREFEITURA DE SAO PAULO: Evitar **MORTES** de familiares e amigos é SEU **DEVER**: se for essencial sair use máscara e mantenha 2 metros de distância.

## social norm

PREFEITURA DE SAO PAULO: a maioria das pessoas já está usando máscara. **FAÇA COMO ELAS**: se for essencial sair use máscara e mantenha 2 metros de distância.

## reciprocity

PREFEITURA DE SAO PAULO: Profissionais de saúde estão arriscando suas vidas. **FAÇA SUA PARTE PARA AJUDA-LOS**: se for essencial sair use máscara e mantenha 2m de distância

## self-efficacy

PREFEITURA DE SAO PAULO: Cada um fazendo sua parte, venceremos o vírus. **A SUA AÇÃO IMPORTA**: se for essencial sair use máscara e mantenha 2 metros de distância

## risk perception

PREFEITURA DE SAO PAULO: Pessoas podem estar contaminadas sem saber. **UMA DELAS PODE SER VOCE**: se for essencial sair use máscara e mantenha 2m de distância.

# MESSAGES SENT

PREFEITURA DE SAO PAULO: Para evitar a contaminação por coronavírus, **FIQUE EM CASA**. Se for essencial sair use **MASCARA** e mantenha 2 metros de **DISTANCIA**.

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PREFEITURA DE SAO PAULO: Pessoas podem estar contaminadas sem saber. **UMA DELAS PODE SER VOCÊ**. Não coloque outros em risco: fique em casa.

**Impact evaluation by telephone survey:** questions as "how many times have you left home in the last week?" "when you left home, did you wear a mask?"

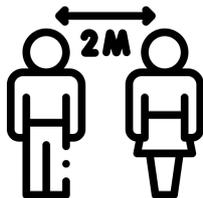
**RTC:** comparing responses to the telephone survey with the message received, and with people who have not received any messages

**Civic Duty:** people who received this message were more likely to report preventive behavior against covid-19

# RESULTS



Text messages are an **effective tool to inform** the population.



Citizens who received the text messages were **12.75% more likely to report the correct distance** than those who did not.

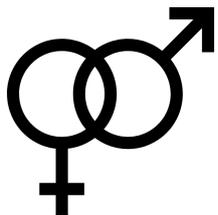


The ones who received frame versions 'civic duty' were **3% more likely to report always wearing a mask.**



The **'civic duty' message**, designed to prime a sense of duty to protect family and friends, **was more consistent through results**, and thus it was the motivational message escalated.

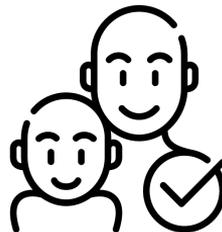
# RESULTS



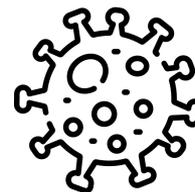
**Men have more risky behavior** than women;



People in **richer neighborhoods** left home more often to **exercise and walk their dogs**; people in **poorer neighborhoods** left home more often to **go to work**;



**Older people wear masks** more often and go out less often.



People who **have already had the disease** have **less fear** and are **more supportive** of **social isolation** measures.

People who **know someone** who has already had or who has **died** by the disease have **more fear** and are **more supportive of mask wearing** measures.

# FINAL MESSAGES SENT

## SMS 1 - inform (08/10)

segunda-feira, 10 de ago • 20:04

PREFEITURA DE SAO PAULO: Se precisar sair use MASCARA e mantenha 2 METROS DE DISTANCIA. Vai passar o dia fora? Planeje-se p/ trocar mascaras. Mais em [bit.ly/33q6JeR](https://bit.ly/33q6JeR)



Toque para carregar e visualizar

*SÃO PAULO CITY HALL: if you need to go out wear a MASK and keep a 2 METERS DISTANCE. Are you going to spend the day outside? Plan ahead to change masks. More at [bit.ly/33q6JeR](https://bit.ly/33q6JeR)*

## SMS 2 - instruct (08/12)

quarta-feira, 12 de ago • 09:55

PREFEITURA DE SAO PAULO: use mascara de tecido ao sair de casa cobrindo BOCA e NARIZ e justa ao rosto. Troque quando ficar umida e LAVE SEMPRE depois de usar.



*SÃO PAULO CITY HALL: wear a fabric mask when you go out covering MOUTH and NOSE and tight to your face. Change it when it gets wet and ALWAYS WASH IT after use.*

## SMS 3 - motivate (08/14)

sexta-feira, 14 de ago • 09:01

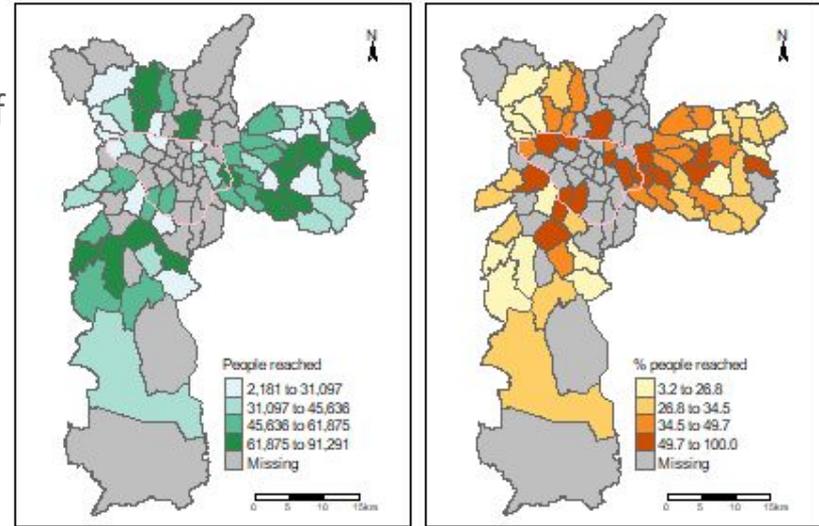
PREFEITURA DE SAO PAULO: evitar MORTES de familiares e amigos e SEU DEVER: se precisar sair use mascara e mantenha 2 metros de distancia dos outros.



*SÃO PAULO CITY HALL: to avoid DEATHS from family and friends is YOUR DUTY: if you need to go out wear mask and keep 2 meter distance from others.*

# LAUNCHING STRATEGY

- **8.24 million messages** were sent to **2.8 million people**;
- Administrative districts with the highest incidence per capita of the disease were prioritized (60 out of 96);
- Fully financed with external resources - IDB and Vital Strategies;
- **Who received?** 92% do not have health insurance; 93% do not own a property; 71% do not declare income tax.



# TIMELINE



dec.2020

jan.2021

4

Push notifications  
in bus terminals

5

Video  
observations

6

Use of results to  
adapt SPTrans  
communications  
and campaigns

# WHY BUS TERMINALS?

**Gradual return of the economy:** increased movement of people on public transportation

The content of the message using the **civic duty** insight was **readjusted** to guide citizens at terminals and commuting

## **Encouraged behaviors:**

- wear a mask correctly,
- wash hands,
- keep your distance from others,
- avoid touching your face or eating during the bus ride

# Push Notifications in bus terminals

We adapted the previous messages into one text and image communication strategy that was sent to ~1 million public transport users at all municipal bus terminals using a geofence technology.

## Push Notification: message + image

**COVID-19 ALERT:** to avoid DEATHS from family and friends is also YOUR DUTY. Outside your home, wear a mask covering MOUTH and NOSE all the time. At the terminals, keep DISTANCE from people in the queue. Inside buses, avoid eating or touching your face and always use HAND SANITIZER. Help keep the transportation system safe! More at [bit.ly/PMSP\\_covid19](https://bit.ly/PMSP_covid19)

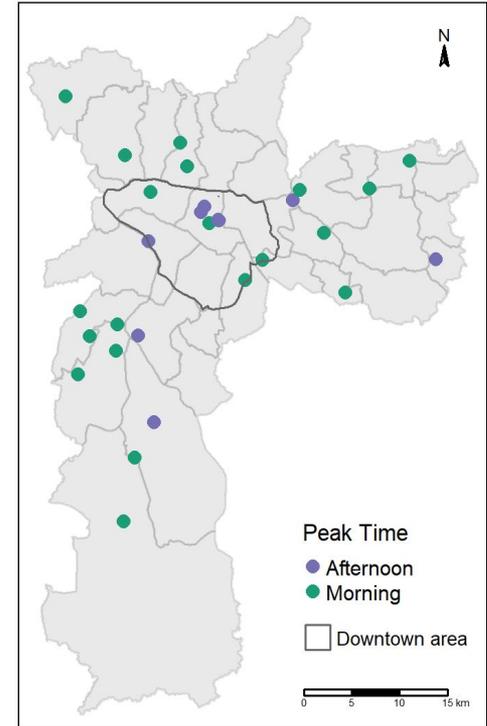


## Original Message (Portuguese)

ALERTA COVID19: Evitar MORTES de familiares e amigos também é SEU DEVER! Fora de casa, use máscara cobrindo BOCA e NARIZ o tempo todo. Nos terminais, mantenha DISTÂNCIA das pessoas na fila. Dentro dos ônibus, evite comer ou tocar o rosto e use sempre ÁLCOOL GEL nas mãos. Ajude a manter o sistema de transporte seguro! Mais em [bit.ly/PMSP\\_covid19](https://bit.ly/PMSP_covid19)

# Push Notifications in bus terminals

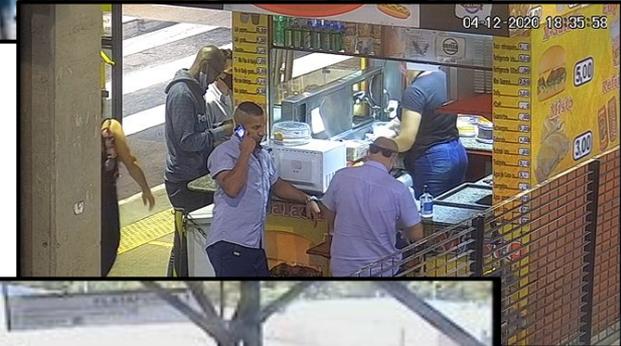
- **Criteria:** peak time were defined according to data from SPTrans
- The **31 terminals** received the campaign messages
- **3 hours** a day
- **During the 5 days:** between 07th and 11th of December



**Bus terminals in the city of São Paulo**

Source: (011).lab

- To understand the extent to which the messages were effective in changing people's behavior, we decided to **rely on observation**.
- That was the chosen strategy because there are no data collection of **“masks properly used”**, or **“hands properly cleaned”**. With this strategy, we will not have a causal inference about the effect of our communication campaign.
- Nevertheless, with the observations we can have insights into **typical behaviors** to inform and improve SPtrans communications and campaigns.



# Takeaway 1: Most people comply with the preventive behaviors

When there are not many people on line, passengers keep a safe distance and avoid crowding. They obey the floor markings when it is possible.



## Takeaway 2: The vast majority of people wear a mask and keep their distance at terminals - when this is possible.

When there are many people in line, **passengers do not keep their distance**



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When there are many people in line, **passengers do not keep their distance**



**Recommendation:** Mask is even more important when it is not possible to maintain distance

## Communicative poster positioned next to the crosswalk and the terminal's recharging station



## Virtual poster encouraging social distancing in waiting line

**Mantenha a distância segura  
entre os passageiros próximos a você.  
Respeite as marcações no chão das  
plataformas para o embarque  
e use a máscara.**



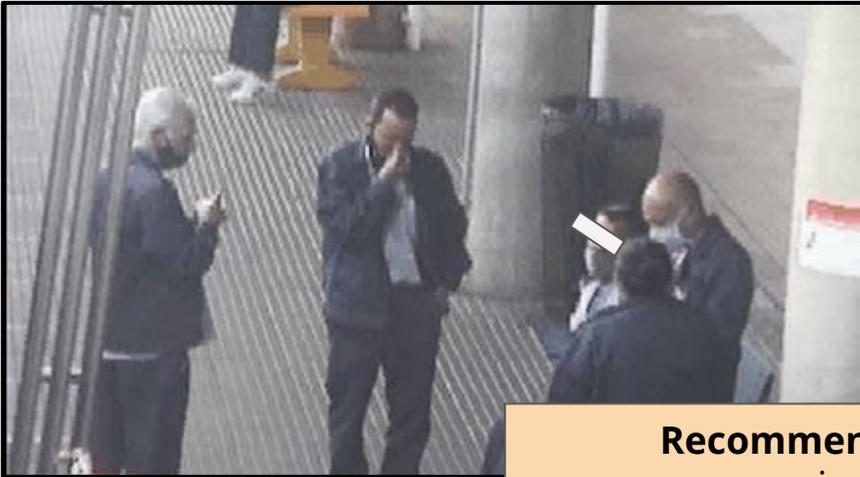
# Takeaway 3: Terminals' workers need to comply with the sanitary rules - they are the example

The behavioral science literature shows that people are influenced by what others do (social norms). Knowing that, it is crucial that bus terminals' workers, from shopkeepers to bus drivers follow the rules because passengers will use them as an example of how to behave



## Takeaway 3: Terminals' workers need to comply with the sanitary rules - they are the example

The behavioral science literature shows that people are influenced by what others do (social norms). Knowing that, it is crucial that bus terminals' workers, from shopkeepers to bus drivers) follow the rules because passengers will use them as an example of how to behave



**Recommendation:** reinforce communication with workers

## Takeaway 4: People crowd and don't wear a mask around cafeterias

Cafeterias are places of agglomeration and places where people do not comply with preventive measures because they are eating



# Takeaway 4: People crowd and don't wear mask around cafeterias

Cafeterias are places of agglomeration and places where people do not comply with preventive measures



**Recommendations:** Distance markers around cafeterias  
Suggest removing the mask only when eating/drinking  
Avoid staying in the place if you are not eating

DURANTE A VIAGEM  
E NO TERMINAL  
**PERMANEÇA  
DE MÁSCARA**



**Virtual poster with behavior instructions in  
the cafeterias of the terminals**

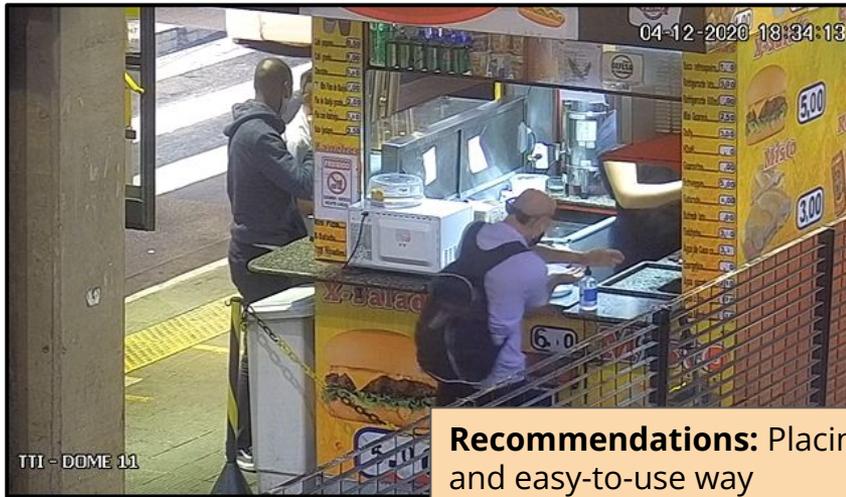
# Takeaway 5: Hand sanitizer needs to be of easy access for people

Hand sanitizer is in distant and hidden places



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Hand sanitizer is in distant and hidden places



**Recommendations:** Placing hand sanitizer in an accessible and easy-to-use way

# Takeaway 6: When people are talking in the cell phone they often don't use the mask properly

We see in the videos that people often remove the mask to talk or to send an audio in the cell phone.



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We see in the videos that people often remove the mask to talk or to send an audio in the cell phone.



**Recommendations:** It highlights the importance to communicate that it is mandatory to wear a mask even if you are using your cell phone

DURANTE A VIAGEM  
E NO TERMINAL  
**PERMANEÇA  
DE MÁSCARA**



**Virtual poster encouraging the use of a mask when talking on the cell phone**

# Lessons Learned

## What have we learned with this project?

- ✓ designing public policies that **consider the behavioral dimension** leads us to more effective actions for **real citizens**
- ✓ more **assertive, short** and **constant** communications are important for **risky** behavior, instead of doing big generic campaigns
- ✓ **observe** people's behavior, **test** and **experiment** solutions rather than **assuming** how they would behave