

ONLINE APPENDIX

Efficiency of Bus Priority Infrastructure

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Figure A.1: Bus lanes and corridors



(a) Bus lane alongside unrestricted traffic



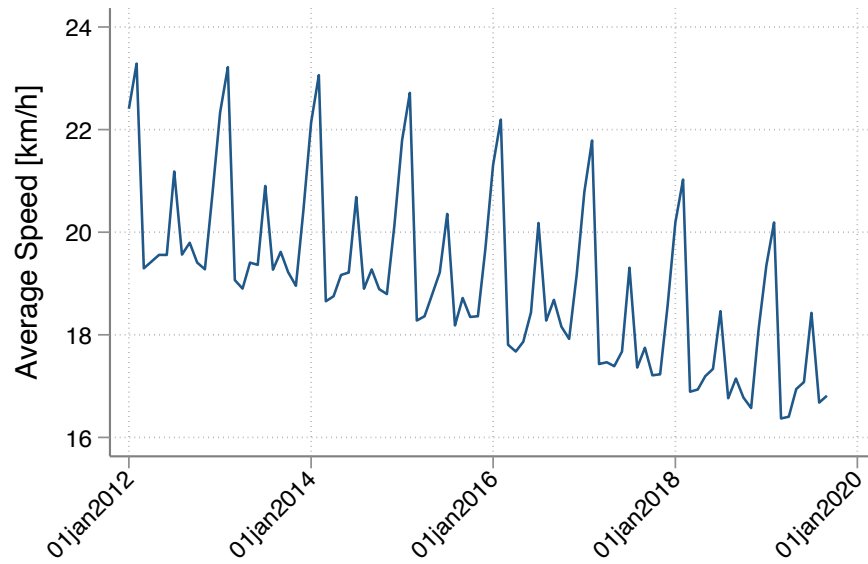
(b) Bus lanes forming a bus-only street



(c) BRT Corridor

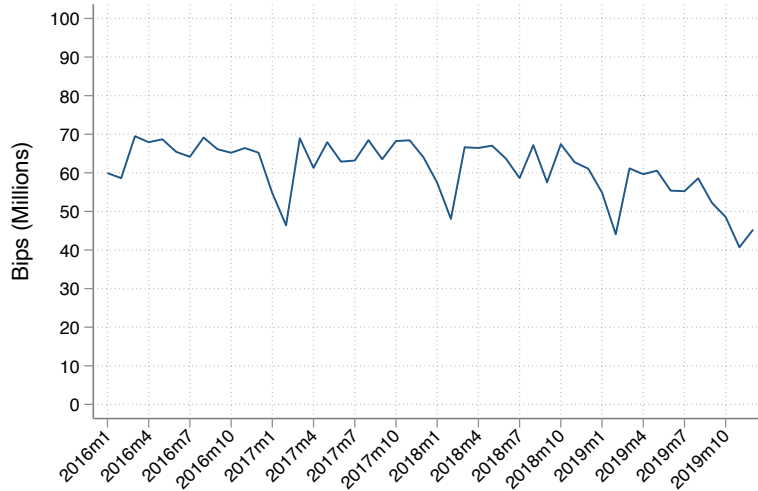
Notes. Examples of the priority infrastructure we study. All photos are from routes in our dataset. Panel (a) shows a typical bus lane alongside unrestricted traffic. This bus lane is in the data of yearly bus priority infrastructure that we use for the main analysis in Section 3. Panel (b) shows the bus lanes forming a bus-only street with monitoring cameras of the second project we study (Figure 2). Panel (c) shows the BRT corridor of the first project we study (Figure 1).

Figure A.2: Speed evolution

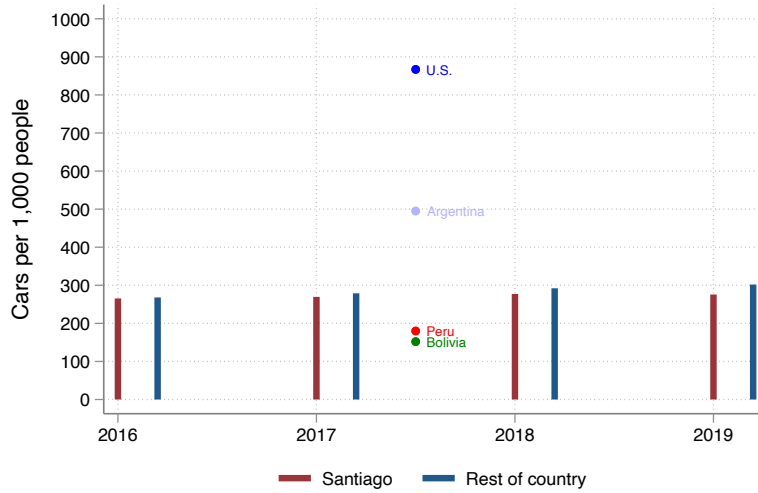


Notes. This figure shows the monthly average speed of all bus trips in peak periods in Santiago from January 2012 until September 2019. Speed increases significantly during the summer months (January and February).

Figure A.3: Context in numbers



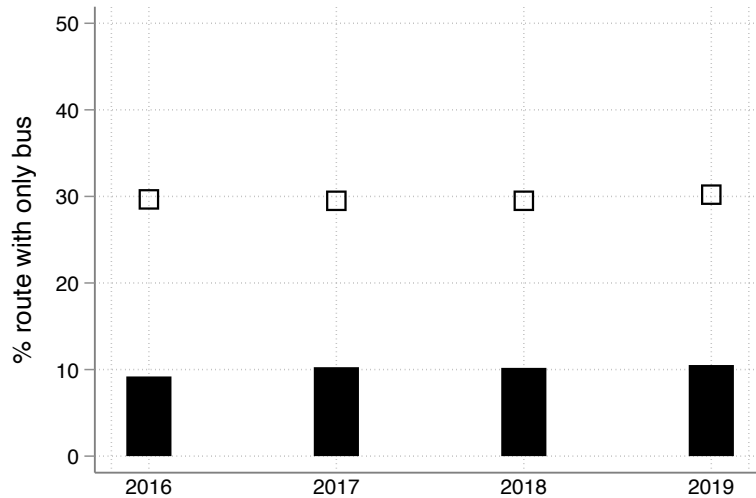
(a) Travelers, 2016-2019



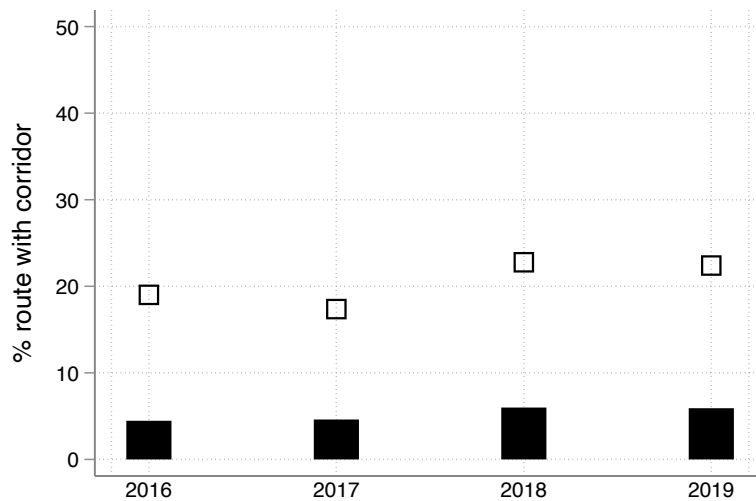
(b) Registered cars, 2016-2019

Notes. Panel (a) shows the number of users who paid to ride in a public bus in the city of Santiago. Ridership decreases significantly during the summer months (January and February). Panel (b) shows the number of registered cars per 1,000 people in Chile per year between 2016 and 2019. Annual data on registered cars and population are publicly available and published by the National Statistics Bureau. Red bars represent the number of cars per 1,000 people in the capital city of Santiago, defined as the province of Santiago and the municipality of Puente Alto. The population of the city of Santiago was 6.5 million in 2019. Blue bars represent the number of cars per 1,000 people in the rest of the country. For comparison, we also add the number of cars per 1,000 people circa 2017 in the three neighboring countries (Argentina, Bolivia, Peru) and the United States. Country-level car data are gathered and published by Our World in Data (2024).

Figure A.4: Bus lanes and corridors over time



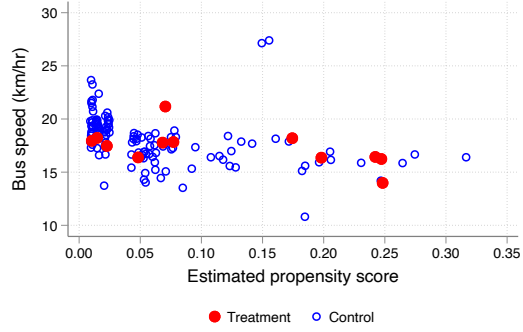
(a) Bus lanes



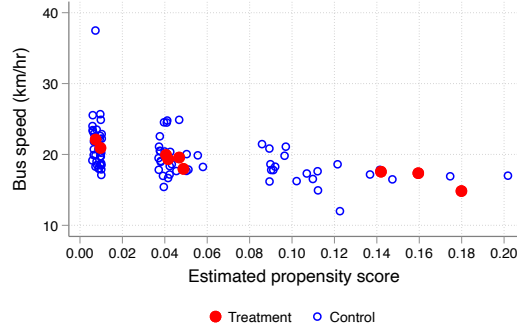
(b) Corridors

Notes. The figures in both panels describe the prevalence of priority infrastructure in the 507 routes in our main dataset. The y -axis represents the percentage of the route, and the x -axis represents the years in our dataset. Black bars (hollow squares) describe the percentage of priority infrastructure in the average (90th percentile) route. Panel (a) shows that bus lanes cover 10% of the average route, with a slight increase from 9% in 2016 to 11% in 2019. Panel (b) shows that bus corridors are less prevalent and covered only 4% of the average route in 2016, a number that increased to 6% in 2019. Hollow squares zoom into routes in the 90th percentile of the distribution of priority infrastructure and show that there are routes with one-third of their length with bus lanes and one-fifth with corridors.

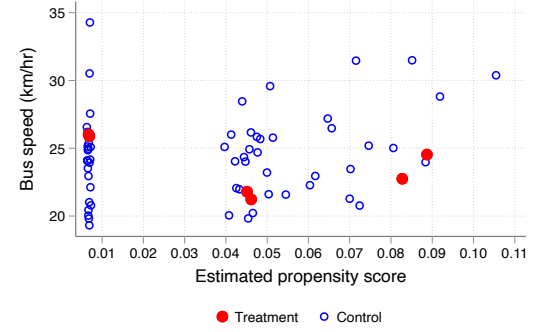
Figure A.5: Estimated propensity score, construction of corridor



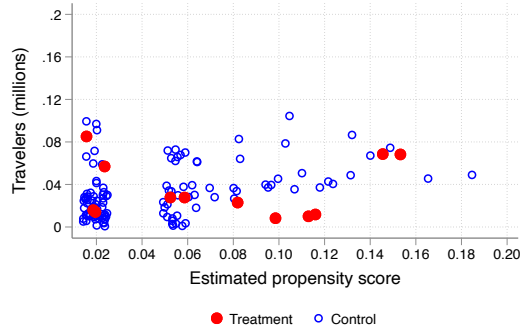
(a) Speed, peak hours



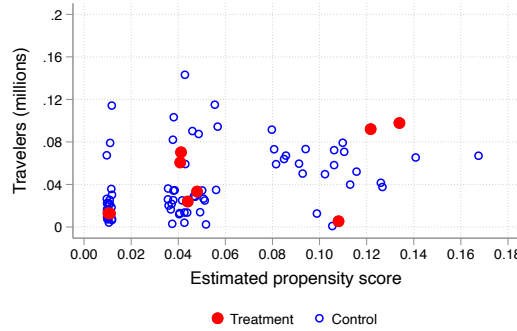
(b) Speed, off-peak hours



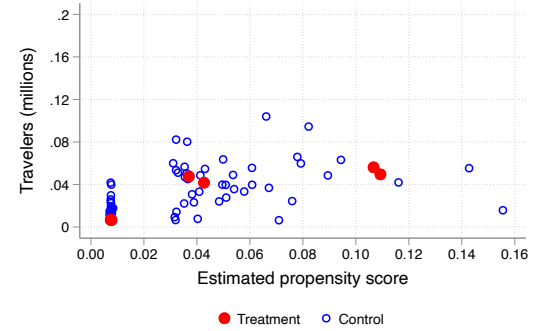
(c) Speed, weekend



(d) Travelers, peak hours



(e) Travelers, off-peak hours

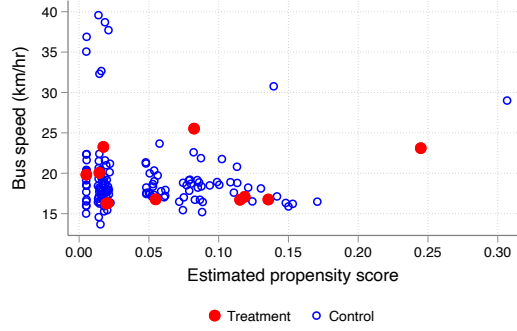


(f) Travelers, weekend

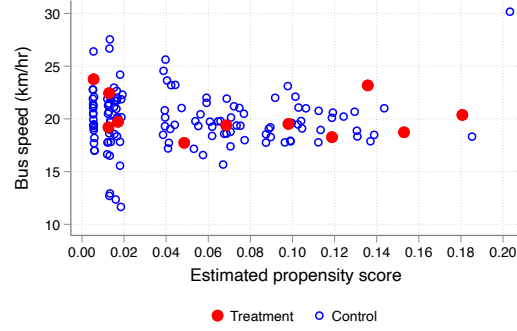
V.

Notes. These figures present the predicted probability of experiencing the project under study based on observable characteristics (bus speed, number of travelers, route length, number of trips) 12 months before the project was completed. The y -axis shows the main predictor and the x -axis shows the predicted probability of the project, i.e., the propensity score. Each circle represents a route, with red circles representing the routes affected by the project and blue circles representing the chosen control routes that did not experience the project. The number of treatment/control routes is 18/255. We calculate all predicted probabilities with a cross-sectional probit model. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays.

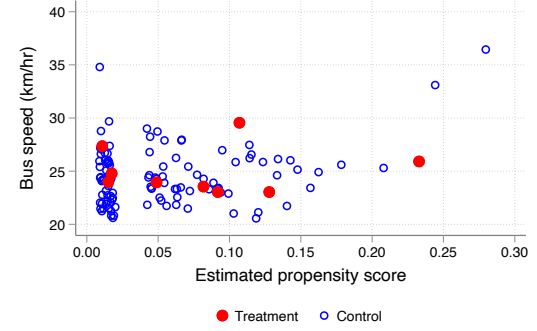
Figure A.6: Estimated propensity score, Only Bus Lanes and Cameras



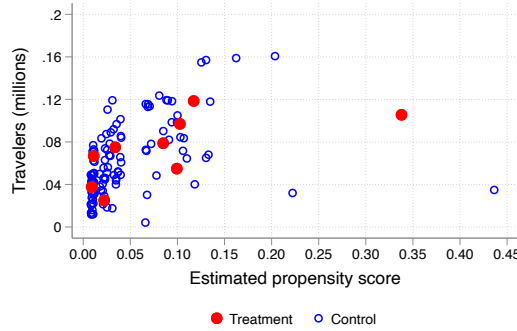
(a) Speed, peak hours



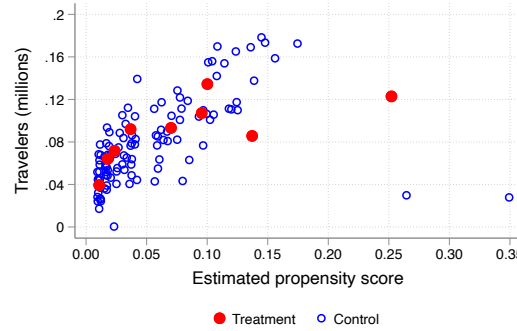
(b) Speed, off-peak hours



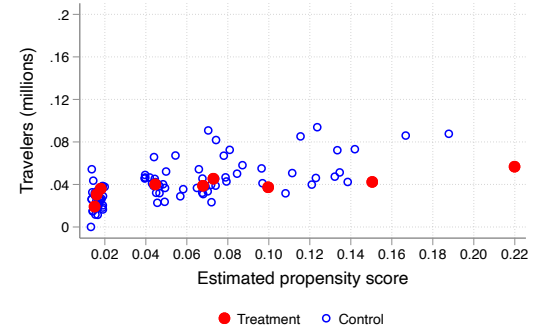
(c) Speed, weekend



(d) Travelers, peak hours



(e) Travelers, off-peak hours

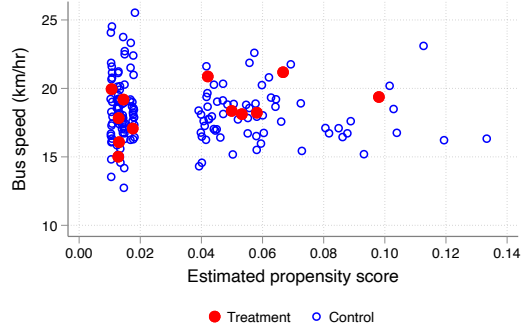


(f) Travelers, weekend

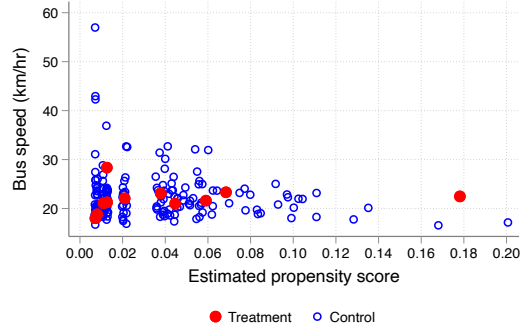
VII

Notes. These figures present the predicted probability of experiencing the project under study based on observable characteristics (bus speed, number of travelers, route length, number of trips) 12 months before the project was completed. The y -axis shows the main predictor and the x -axis shows the predicted probability of the project, i.e., the propensity score. Each circle represents a route, with red circles representing the routes affected by the project and blue circles representing the chosen control routes that did not experience the project. The number of treatment/control routes is 11/108. We calculate all predicted probabilities with a cross-sectional probit model. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays.

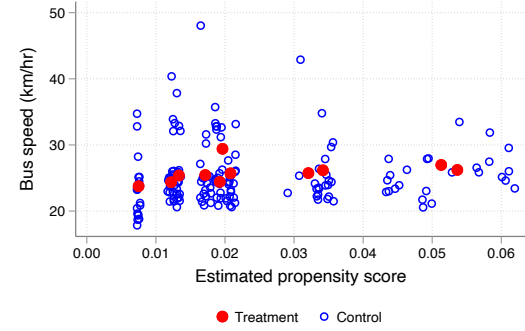
Figure A.7: Estimated propensity score, cameras only



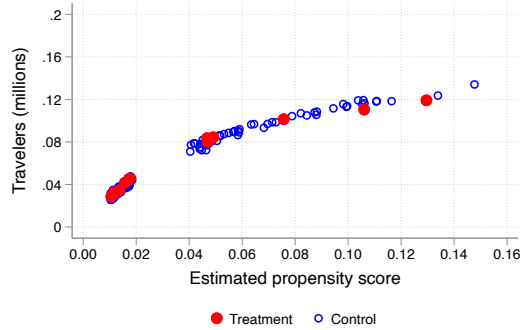
(a) Speed, peak hours



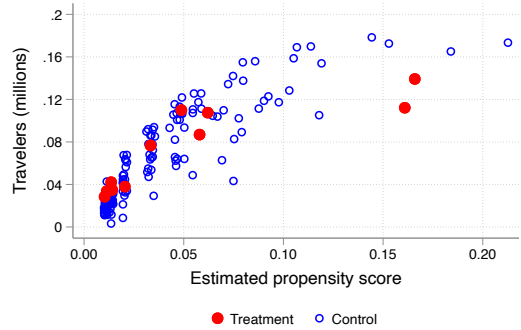
(b) Speed, off-peak hours



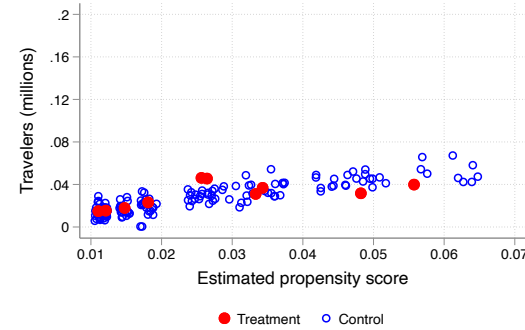
(c) Speed, weekend



(d) Travelers, peak hours



(e) Travelers, off-peak hours



(f) Travelers, weekend

VIII

Notes. These figures present the predicted probability of experiencing the project under study based on observable characteristics (bus speed, number of travelers, route length, number of trips) 12 months before the project was completed. The y -axis shows the main predictor and the x -axis shows the predicted probability of the project, i.e., the propensity score. Each circle represents a route, with red circles representing the routes affected by the project and blue circles representing the chosen control routes that did not experience the project. The number of treatment/control routes is 11/182. We calculate all predicted probabilities with a cross-sectional probit model. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays.

Table A.1: Exogeneity test

Dependent variable: Change in priority infrastructure next year			
	Work days		
	Peak hours	Off-peak hours	Weekend
Panel A: Corridors	(1)	(2)	(3)
Log bus speed	-0.033 (0.028)	-0.027 (0.023)	0.029 (0.020)
Log travelers	-0.008 (0.006)	-0.006 (0.005)	-0.006 (0.007)
Panel B: Bus lanes			
Log bus speed	-0.033 (0.022)	-0.030 (0.022)	-0.064** (0.026)
Log travelers	-0.004 (0.004)	0.007 (0.009)	0.001 (0.012)
Observations	1,521	1,326	1,260
Bus routes	507	442	420
Trips (in millions)	12.3	15.5	13.7
Avg. dep. variable panel A (%)	0.005	0.005	0.004
Avg. dep. variable panel B (%)	0.004	0.005	0.005
Route fixed effects	Y	Y	Y
Year fixed effects	Y	Y	Y

Notes: This table shows the relationship between changes in priority infrastructure (corridors in Panel A, bus lanes in Panel B) and (i) bus speed and (ii) travelers. The unit of observation is a route in a given year between 2016 and 2019. All regression specifications include route and year fixed effects. Each coefficient and standard error comes from a separate regression. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. Robust standard errors are clustered at the route level. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.2: Exogeneity test, longer time horizon

	Dependent variable: Change in priority infrastructure...					
	Two years ahead			Three years ahead		
	Work days		Weekend	Work days		Weekend
	Peak hours	Off-peak hours		Peak hours	Off-peak hours	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Corridors						
Log bus speed	-0.135*	-0.075	-0.047	0.000	0.002	0.001
	(0.072)	(0.074)	(0.033)	(0.001)	(0.002)	(0.001)
Log travelers	-0.007	0.026	0.052***	-0.001	-0.002	-0.002
	(0.009)	(0.020)	(0.018)	(0.000)	(0.001)	(0.001)
Panel B: Bus lanes						
Log bus speed	-0.030	-0.071**	-0.040**	-0.006	0.003	0.004
	(0.022)	(0.028)	(0.019)	(0.006)	(0.009)	(0.010)
Log travelers	0.001	0.002	-0.001	0.001	0.001	0.002
	(0.007)	(0.015)	(0.008)	(0.001)	(0.001)	(0.001)
Observations	1,014	884	840	507	442	420
Bus routes	507	442	420	507	442	420
Trips (in millions)	8.2	10.2	8.8	4.3	4.9	4.1
Avg. dep. variable panel A (%)	0.007	0.006	0.005	0.000	0.000	0.000
Avg. dep. variable panel B (%)	0.001	0.001	0.001	0.003	0.003	0.003
Route fixed effects	Y	Y	Y	N	N	N
Year fixed effects	Y	Y	Y	N	N	N

Notes: This table shows the relationship between changes in priority infrastructure (corridors in Panel A, bus lanes in Panel B) and (i) bus speed and (ii) travelers. The unit of observation is a route in a given year between 2016 and 2019. Columns 1-3 examine the relationship separated by two years, while columns 4-6 repeat the exercise but three years apart. Regression specifications in columns 1-3 include route and year fixed effects. Each coefficient and standard error comes from a separate regression. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. Robust standard errors are clustered at the route level. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.3: Joint estimation of infrastructure effects

Dependent variable:	Log bus speed (km/hr)			Log million travelers		
	Work days			Work days		
	Peak hours	Off-peak hours	Weekend	Peak hours	Off-peak hours	Weekend
	(1)	(2)	(3)	(4)	(5)	(6)
Percentage route with bus corridors	0.198*** (0.042)	0.156*** (0.043)	-0.049 (0.040)	-0.175 (0.207)	0.253* (0.148)	0.013 (0.100)
Percentage route with bus lanes	0.060 (0.082)	0.048 (0.084)	0.065 (0.074)	0.094 (0.208)	0.467* (0.252)	0.604 (0.269)
Observations	2,028	1,768	1,680	2,028	1,768	1,680
Bus routes	507	442	420	507	442	420
Trips (in millions)	16.1	20.3	17.5	16.1	20.3	20.4
Avg. dependent variable (levels)	19.22	20.87	23.88	0.31	0.33	0.23
Route fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y

Notes: This table shows two-way fixed effects estimates between priority infrastructure (bus corridors, bus lanes) and (i) bus speed in columns 1-3, and (ii) travelers in columns 4-6. The unit of observation is a route in a given year between 2016 and 2019. All regression specifications include route and year fixed effects. Each column represents a separate regression. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. Robust standard errors are clustered at the route level. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.4: Main estimates with indicators for infrastructure

Dependent variable:	Log bus speed (km/hr)			Log million travelers		
	Work days			Work days		
	Peak hours	Off-peak hours	Weekend	Peak hours	Off-peak hours	Weekend
	(1)	(2)	(3)	(4)	(5)	(6)
Indicator route with bus corridors	0.040*** (0.010)	0.028*** (0.010)	-0.003 (0.007)	0.027 (0.030)	0.055** (0.024)	0.026 (0.017)
Indicator route with bus lanes	-0.000 (0.012)	0.004 (0.012)	0.007 (0.010)	0.025 (0.029)	0.048 (0.035)	0.054 (0.037)
Observations	2,028	1,768	1,680	2,028	1,768	1,680
Bus routes	507	442	420	507	442	420
Trips (in millions)	16.1	20.3	17.5	16.1	20.3	20.4
Avg. dependent variable (levels)	19.22	20.87	23.88	0.31	0.33	0.23
Route fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y

Notes: This table shows two-way fixed effects estimates between priority infrastructure (bus corridors, bus lanes) and (i) bus speed in columns 1-3, and (ii) travelers in columns 4-6. The unit of observation is a route in a given year between 2016 and 2019. All regression specifications include route and year fixed effects. All regressions use an indicator for routes with more than 10% of priority infrastructure. Each coefficient and standard error comes from a separate regression. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. Robust standard errors are clustered at the route level. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.5: Alternative indicator, change of 5pp. in infrastructure

Dependent variable:	Log bus speed (km/hr)			Log million travelers		
	Work days			Work days		
	Peak hours	Off-peak hours	Weekend	Peak hours	Off-peak hours	Weekend
Panel A	(1)	(2)	(3)	(4)	(5)	(6)
Indicator route with bus corridors	0.026*** (0.005)	0.021*** (0.005)	0.007 (0.005)	-0.022 (0.026)	-0.018 (0.021)	-0.021 (0.015)
Indicator route with bus lanes	-0.006 (0.004)	-0.003 (0.005)	-0.002 (0.005)	-0.026* (0.015)	0.007 (0.016)	-0.006 (0.013)
Panel B						
Indicator route with bus corridors	0.037*** (0.009)	0.029*** (0.009)	-0.002 (0.009)	-0.078 (0.069)	0.046* (0.027)	-0.007 (0.028)
Indicator route with bus lanes	0.004 (0.005)	0.000 (0.005)	0.002 (0.005)	-0.020 (0.025)	-0.002 (0.023)	0.013 (0.021)
Observations	2,028	1,768	1,680	2,028	1,768	1,680
Bus routes	507	442	420	507	442	420
Trips (in millions)	16.1	20.3	17.5	16.1	20.3	20.4
Avg. dependent variable (levels)	19.22	20.87	23.88	0.31	0.33	0.23
Route fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y

Notes: Panel A shows two-way fixed effects estimates between priority infrastructure (bus corridors, bus lanes) and (i) bus speed in columns 1-3, and (ii) travelers in columns 4-6. The unit of observation is a route in a given year between 2016 and 2019. Panel B presents estimates of the same relationship but using the method proposed by Borusyak et al. (2024). All regression specifications include route and year fixed effects. All regressions use indicators that take the value of one for routes with more than 5 percentage points (pp.) changes in priority infrastructure from one year to the following. Each coefficient and standard error comes from a separate regression. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. Robust standard errors are clustered at the route level. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.6: Alternative indicator, change of 10pp. in infrastructure

Dependent variable:	Log bus speed (km/hr)			Log million travelers		
	Work days		Weekend	Work days		
	Peak hours	Off-peak hours		Peak hours	Off-peak hours	Weekend
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
Indicator route with bus corridors	0.045*** (0.007)	0.034*** (0.006)	0.008 (0.006)	-0.031 (0.040)	-0.030 (0.037)	-0.024 (0.022)
Indicator route with bus lanes	-0.007 (0.007)	-0.007 (0.007)	-0.005 (0.006)	-0.001 (0.028)	0.037 (0.025)	0.006 (0.017)
Panel B						
Indicator route with bus corridors	0.063*** (0.011)	0.046*** (0.010)	-0.006 (0.009)	-0.050 (0.060)	0.040 (0.033)	0.018 (0.018)
Indicator route with bus lanes	0.014 (0.010)	0.007 (0.010)	0.008 (0.010)	-0.020 (0.036)	-0.036 (0.036)	-0.002 (0.038)
Observations	2,028	1,768	1,680	2,028	1,768	1,680
Bus routes	507	442	420	507	442	420
Trips (in millions)	16.1	20.3	17.5	16.1	20.3	20.4
Avg. dependent variable (levels)	19.22	20.87	23.88	0.31	0.33	0.23
Route fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y

Notes: Panel A shows two-way fixed effects estimates between priority infrastructure (bus corridors, bus lanes) and (i) bus speed in columns 1-3, and (ii) travelers in columns 4-6. The unit of observation is a route in a given year between 2016 and 2019. Panel B presents estimates of the same relationship but using the method proposed by Borusyak et al. (2024). All regression specifications include route and year fixed effects. All regressions use indicators that take the value of one for routes with more than 5 percentage points (pp.) changes in priority infrastructure from one year to the following. Each coefficient and standard error comes from a separate regression. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. Standard errors are clustered at the route level. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.7: Non-linear effects of priority infrastructure, bus speed

	Dependent variable: Log bus speed					
	Peak hours		Off-peak hours		Weekend	
	Corridor	Only bus	Corridor	Only bus	Corridor	Only bus
	(1)	(2)	(3)	(4)	(5)	(6)
Indicator for percentage $\in (0, 0.05]$	-0.006 (0.009)	0.009 (0.009)	-0.005 (0.014)	0.010 (0.009)	-0.001 (0.011)	0.007 (0.007)
Indicator for percentage $\in [0.05, 0.10)$	0.000 (0.010)	-0.008 (0.010)	0.001 (0.010)	-0.005 (0.011)	-0.012 (0.011)	-0.006 (0.009)
Indicator for percentage $\in [0.10, 0.15)$	0.028*** (0.010)	-0.001 (0.012)	0.021* (0.011)	0.010 (0.013)	-0.006 (0.009)	0.009 (0.011)
Indicator for percentage $\in [0.15, 0.20)$	0.044*** (0.015)	-0.008 (0.022)	0.034** (0.014)	0.001 (0.021)	-0.011 (0.011)	0.001 (0.017)
Indicator for percentage $\in [0.20, 0.25)$	0.047** (0.018)	0.017 (0.027)	0.032* (0.019)	0.010 (0.027)	-0.007 (0.013)	0.017 (0.023)
Indicator for percentage $\in [0.25, 0.30)$	0.061*** (0.020)	0.014 (0.019)	0.038** (0.019)	0.013 (0.017)	0.042* (0.023)	0.014 (0.014)
Indicator for percentage $\in [0.30, 0.35)$	0.078*** (0.026)	-0.007 (0.028)	0.070*** (0.023)	0.012 (0.023)	0.029 (0.020)	0.008 (0.021)
Indicator for percentage $\in [0.35, 0.40)$	0.070** (0.028)	0.073 (0.051)	0.033 (0.030)	0.069 (0.055)	0.011 (0.021)	0.050 (0.047)
Indicator for percentage $\in [0.40, 0.45)$	0.086** (0.035)	0.005 (0.036)	0.075* (0.043)	0.014 (0.053)	0.064* (0.037)	-0.007 (0.051)
Indicator for percentage ≥ 0.45	0.118*** (0.023)	0.079** (0.036)	0.083*** (0.021)	0.122** (0.056)	0.011 (0.020)	0.077 (0.057)
Observations	2,028	2,028	1,768	1,768	1,680	1,680
Bus routes	507	507	442	442	420	420
Route fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y

Notes: Odd (even) columns in this table show the non-linear relationships between bus corridors (bus lanes) and bus speed. The unit of observation is a route in a given year between 2016 and 2019. All regression specifications include route and year fixed effects. The percentage of routes with priority infrastructure is discretized in indicators spanning 5 percentage points, from 0 to more than 45% of the route. Each column shows estimate from a different regression. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. All regressions are weighted by the number of trips in each route. Robust standard errors are clustered by bus route. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.8: Non-linear effects of priority infrastructure, travelers

	Dependent variable: Log travelers					
	Peak hours		Off-peak hours		Weekend	
	Corridor	Only bus	Corridor	Only bus	Corridor	Only bus
	(1)	(2)	(3)	(4)	(5)	(6)
Indicator for percentage $\in (0, 0.05]$	0.006 (0.017)	0.030 (0.038)	0.035** (0.015)	0.031 (0.039)	-0.031** (0.014)	0.086** (0.034)
Indicator for percentage $\in [0.05, 0.10)$	-0.006 (0.035)	0.048 (0.042)	0.068** (0.031)	0.103** (0.045)	-0.056* (0.032)	0.118*** (0.038)
Indicator for percentage $\in [0.10, 0.15)$	0.034 (0.031)	0.049 (0.044)	0.087** (0.034)	0.101** (0.045)	-0.023 (0.020)	0.134*** (0.041)
Indicator for percentage $\in [0.15, 0.20)$	0.037 (0.044)	0.076 (0.049)	0.085** (0.039)	0.111** (0.055)	0.026 (0.026)	0.149** (0.057)
Indicator for percentage $\in [0.20, 0.25)$	0.102** (0.051)	0.079 (0.054)	0.156*** (0.050)	0.130* (0.077)	0.043 (0.034)	0.195** (0.080)
Indicator for percentage $\in [0.25, 0.30)$	0.026 (0.072)	0.004 (0.059)	0.053 (0.065)	0.084 (0.063)	-0.042 (0.044)	0.127** (0.062)
Indicator for percentage $\in [0.30, 0.35)$	-0.108 (0.087)	0.071 (0.110)	0.026 (0.090)	0.084 (0.070)	0.023 (0.045)	0.283* (0.165)
Indicator for percentage $\in [0.35, 0.40)$	-0.042 (0.098)	-0.075 (0.087)	0.198** (0.096)	-0.021 (0.081)	0.067 (0.076)	0.125 (0.123)
Indicator for percentage $\in [0.40, 0.45)$	-0.101 (0.091)	-0.029 (0.106)	-0.032 (0.108)	0.167* (0.098)	0.001 (0.117)	0.351** (0.149)
Indicator for percentage ≥ 0.45	-0.142 (0.115)	0.055 (0.108)	0.074 (0.088)	0.205** (0.088)	-0.036 (0.046)	0.421*** (0.143)
Observations	2,028	2,028	1,768	1,768	1,680	1,680
Bus routes	507	507	442	442	420	420
Route fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y

Notes: Odd (even) columns in this table show the non-linear relationships between bus corridors (bus lanes) and travelers. The unit of observation is a route in a given year between 2016 and 2019. All regression specifications include route and year fixed effects. The percentage of routes with priority infrastructure is discretized in indicators spanning 5 percentage points, from 0 to more than 45% of the route. Each column shows estimate from a different regression. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. All regressions are weighted by the number of trips in each route. Robust standard errors are clustered by bus route. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.9: Robustness to model specifications

	Peak hours		Off-peak hours		Weekend	
	CORR	OBL	CORR	OBL	CORR	OBL
<i>Baseline specification</i>	(1)	(2)	(3)	(4)	(5)	(6)
<i>Log bus speed (km/hr)</i>	0.209*** (0.043)	0.027 (0.078)	0.155*** (0.043)	0.045 (0.084)	-0.050 (0.040)	0.066 (0.074)
<i>Log travelers</i>	-0.199 (0.215)	0.100 (0.209)	0.246* (0.147)	0.462* (0.253)	-0.001 (0.101)	0.603** (0.268)
Panel A: Bus speed						
Adds controls: log route distance	0.196*** (0.041)	0.046 (0.083)	0.157*** (0.042)	0.033 (0.086)	-0.049 (0.039)	0.062 (0.074)
Adds controls: Unit effects	0.197*** (0.042)	0.055 (0.081)	0.155*** (0.043)	0.045 (0.084)	-0.050 (0.039)	0.066 (0.074)
Adds controls: Highways	0.198*** (0.042)	0.098 (0.060)	0.157*** (0.043)	0.066 (0.067)	-0.049 (0.039)	0.076 (0.065)
Dependent variable in levels (km/hr)	3.674*** (0.830)	1.022 (1.857)	3.292*** (0.934)	1.086 (2.039)	-0.842 (1.003)	1.772 (2.178)
Without weights by trips	0.252*** (0.034)	0.074 (0.072)	0.196*** (0.048)	0.056 (0.077)	-0.050 (0.048)	0.037 (0.076)
Weighted by kilometers traveled	0.161*** (0.049)	0.023 (0.094)	0.159*** (0.047)	0.034 (0.101)	-0.034 (0.045)	0.055 (0.092)
Panel B: Travelers						
Adds controls: log route distance	-0.190 (0.208)	-0.009 (0.167)	0.274* (0.147)	0.283 (0.194)	0.046 (0.116)	0.438** (0.211)
Adds controls: Unit effects	-0.177 (0.207)	0.098 (0.207)	0.246* (0.147)	0.462* (0.253)	-0.001 (0.101)	0.603** (0.268)
Adds controls: Highways	-0.178 (0.207)	0.072 (0.198)	0.241 (0.147)	0.422** (0.211)	-0.013 (0.100)	0.540** (0.213)
Dependent variable in levels (millions)	-0.027 (0.088)	-0.139 (0.118)	0.134 (0.089)	-0.012 (0.135)	0.049 (0.050)	0.085 (0.078)
Without weights by trips	-0.445 (0.436)	0.088 (0.199)	0.216 (0.169)	0.372 (0.243)	-0.065 (0.106)	0.607** (0.290)
Weighted by kilometers traveled	-0.022 (0.149)	0.171 (0.197)	0.219 (0.156)	0.486* (0.289)	0.015 (0.102)	0.616** (0.311)
Observations	2,208	2,208	1,768	1,768	1,680	1,680
Routes	507	507	442	442	420	420
Avg. dep. variable (panel A)	19.22	19.22	20.87	20.87	23.88	23.88
Avg. dep. variable (panel B)	0.31	0.31	0.33	0.33	0.23	0.23

Notes: This table shows the robustness of results in Table 2. Each coefficient and standard error comes from a separate regression. For reference, the upper panel (“Baseline specification”) presents the benchmark estimate. Panels A and presents robustness exercises for bus speed and travelers separately. Peak hours are from 6.30 to 8.29 hrs in the morning and from 17.30 to 20.29 hrs in the afternoon. Off-peak hours are from 9.30 to 12.29 hrs in the morning, from 14.00 to 17.29 hrs in the afternoon, and from 21.30 to 22.59 hrs at night. The remaining hours of the day correspond to “transition” or “night” hours. Work days include days from Monday to Friday that are not a holiday. Weekend hours include all hours on Saturdays, Sundays, and holidays. Robust standard errors are clustered by bus route. Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.