Appendix

A Additional Summary Statistics Tables

Table A1: Summary statistics by type of user

	Daily, weekly and monthly (1)		Bimonthly, quarterly, and annual (2)		Never users (3)		Mean difference p-value		
	Mean	SD	Mean	SD	Mean	SD	(1)-(2)	(2)-(3)	(1)-(3)
Covariates:									
La Paz	0.46	0.50	0.39	0.49	0.44	0.50	0.00	0.03	0.34
Male	0.79	0.41	0.78	0.41	0.75	0.43	0.86	0.10	0.04
Age	46.97	14.22	45.81	14.17	49.41	15.46	0.07	0.00	0.00
Single	0.12	0.33	0.10	0.29	0.09	0.29	0.07	0.68	0.01
Married/cohabiting	0.73	0.45	0.75	0.44	0.73	0.44	0.35	0.37	0.95
Separated/divorced	0.07	0.26	0.07	0.26	0.08	0.27	0.80	0.69	0.44
Widow	0.08	0.27	0.08	0.28	0.10	0.30	0.76	0.16	0.05
Indigenous	0.55	0.50	0.64	0.48	0.55	0.50	0.00	0.00	0.98
Less than secondary	0.19	0.39	0.25	0.43	0.25	0.43	0.00	0.90	0.00
Comp. secondary and technical	0.41	0.49	0.45	0.50	0.38	0.49	0.05	0.00	0.19
Incomp. and comp. university	0.27	0.45	0.18	0.39	0.19	0.39	0.00	0.80	0.00
Master and PhD.	0.03	0.18	0.02	0.13	0.02	0.15	0.04	0.34	0.15
Disable	0.02	0.15	0.03	0.16	0.04	0.20	0.61	0.08	0.01
Asset index	0.43	1.92	-0.22	1.70	-0.25	1.84	0.00	0.73	0.00
Own automobile	0.23	0.42	0.20	0.40	0.20	0.40	0.06	0.92	0.03
Owner of the property	0.64	0.48	0.61	0.49	0.70	0.46	0.15	0.00	0.00
N^o of household members	4.14	1.77	4.09	1.72	3.83	1.73	0.49	0.00	0.00
St. dev. of elevation	0.04	0.03	0.04	0.03	0.04	0.03	0.42	0.68	0.13
N^o lines pub. trans.	11.97	14.59	9.94	14.71	10.09	13.19	0.00	0.80	0.00
Remittances/transfers	0.15	0.36	0.19	0.39	0.22	0.41	0.02	0.06	0.00
Expenses on transportation during last month (per capita):									
Public	98.25	89.37	83.53	80.85	83.08	78.43	0.00	0.90	0.00
Private	22.93	76.73	24.45	96.21	28.25	112.61	0.69	0.42	0.15
For education	11.05	38.89	6.94	34.06	7.54	29.82	0.01	0.66	0.01
Total	132.23	129.62	114.92	129.53	118.86	142.42	0.00	0.51	0.01
Time dedicated to (in minutes):									
Working	252.16	248.64	257.85	251.95	246.15	256.28	0.61	0.29	0.53
Studying	104.00	168.56	90.00	167.67	61.28	140.27	0.06	0.00	0.00
Household	277.24	168.00	283.26	174.61	307.78	181.67	0.43	0.00	0.00
Transport	95.12	52.92	83.98	49.69	81.61	50.94	0.00	0.28	0.00
Lunch break and meals	103.51	38.02	105.94	43.99	107.47	41.57	0.18	0.41	0.01
Sleeping	434.16	63.47	438.60	59.51	433.77	70.09	0.11	0.10	0.88
Recreation	50.17	68.18	49.26	68.95	44.78	74.27	0.77	0.16	0.05
Other	123.63	118.78	131.11	126.86	157.17	135.28	0.17	0.00	0.00
Income:									
Salary	1,190.23	2,028.46	1,044.75	1,818.91	1,076.96	2,669.19	0.10	0.76	0.22
In kind	19.88	167.37	6.90	66.70	14.33	134.61	0.03	0.14	0.34
Self-employment	1,997.72	4,682.47	1,955.23	5,620.21	1,624.59	3,919.63	0.85	0.10	0.02
Total income	3,207.82	4,614.60	3,006.88	5,551.95	2,715.88	4,363.23	0.37	0.17	0.00
Work:									
Looked for job?	0.01	0.10	0.00	0.04	0.01	0.10	0.01	0.02	0.87
Worked $\geq$ 1 hr last week	0.83	0.37	0.85	0.35	0.79	0.41	0.23	0.00	0.00
Self-employed	0.42	0.49	0.49	0.50	0.42	0.49	0.00	0.00	0.79
Instrument:									
Min. dist. to station (in km)	3.74	3.07	4.88	3.30	4.67	3.41	0.00	0.17	0.00
Sample size	1,286		817		1,474				

Notes: monetary figures, such as expenses on transportation and income, are expressed in Bolivianos.

Table A2: Summary statistics by geographic location

	Group 1 (500 mts.) (1)	Group 2 (500-1500 mts.) (2)	Group 3 (>1500) (3)	Mean difference p-value		
	Mean	Mean	Mean	(1)-(2)	(1)-(3)	(2)-(3)
Covariates:						
La Paz	0.90	0.78	0.33	0.00	0.00	0.00
Male	0.68	0.73	0.79	0.31	0.00	0.01
Age	52.26	51.00	46.68	0.39	0.00	0.00
Single	0.12	0.14	0.09	0.69	0.00	0.23
Married/cohabiting	0.63	0.65	0.76	0.69	0.00	0.00
Separated/divorced	0.13	0.10	0.07	0.31	0.00	0.00
Widow	0.11	0.11	0.08	0.96	0.06	0.36
Indigenous	0.31	0.36	0.64	0.29	0.00	0.00
Less than secondary	0.12	0.14	0.25	0.69	0.00	0.00
Comp. secondary and technical	0.42	0.41	0.40	0.76	0.79	0.65
Incomp. and comp. university	0.28	0.33	0.19	0.31	0.00	0.01
Master and PhD.	0.04	0.04	0.02	0.89	0.01	0.12
Disable	0.04	0.03	0.03	0.58	0.95	0.52
Asset index	0.86	0.83	-0.25	0.92	0.00	0.00
Own automobile	0.26	0.24	0.20	0.66	0.03	0.13
Owner of the property	0.72	0.66	0.65	0.18	0.62	0.10
N^o of household members	3.78	3.79	4.06	0.96	0.00	0.09
St. dev. of elevation	0.02	0.03	0.04	0.00	0.00	0.00
Remittances/transfers	0.21	0.19	0.18	0.65	0.72	0.51
Expenses on transportation during last month (per capita):						
Public	97.85	105.02	84.10	0.43	0.00	0.07
Private	31.90	26.51	24.93	0.52	0.70	0.46
For education	12.06	8.83	8.47	0.33	0.80	0.26
Total	141.81	140.36	117.50	0.91	0.00	0.06
Time dedicated to (in minutes):						
Working	226.50	250.82	252.09	0.33	0.91	0.28
Studying	130.25	85.01	80.68	0.01	0.52	0.00
Household	281.00	301.51	289.06	0.27	0.09	0.62
Transport	83.08	80.27	88.87	0.55	0.00	0.24
Lunch break and meals	98.21	99.63	107.55	0.70	0.00	0.02
Sleeping	446.75	437.95	433.76	0.15	0.13	0.03
Recreation	56.12	46.77	47.62	0.16	0.78	0.21
Other	118.08	138.03	140.37	0.10	0.67	0.06
Income:						
Salary	1,277.17	1,188.97	1,083.21	0.75	0.27	0.33
In kind	20.83	8.08	16.00	0.28	0.16	0.72
Self-employment	1,999.83	1,750.71	1,847.99	0.61	0.61	0.73
Total income	3,297.83	2,947.76	2,947.19	0.51	1.00	0.42
Work:						
Look for job?	0.02	0.01	0.01	0.30	0.91	0.28
Worked $\geq$ 1 hr last week	0.77	0.75	0.84	0.75	0.00	0.03
Self-employed	0.42	0.38	0.45	0.46	0.00	0.47
Instrument:						
Min. dis. to station (in km)	0.35	1.02	5.41	0.00	0.00	0.00
Use Mi Teleférico (month)	0.53	0.44	0.33	0.07	0.00	0.00
Baseline covariates:						
N^o lines pub. trans.	20.68	22.42	7.35	0.35	0.00	0.00
Sample size	115	673	2,696			

Notes: monetary figures, such as expenses on transportation and income, are expressed in Bolivianos.

B Specification of IHS for the main outcome variables

Table B1: Estimation of the first two stages of preferred specification with IHS specification for the outcome variable

	1^{st} stage	2^{nd} stage		Obs.
	$\gamma_{distance}$	α_{use}	$KP-test$	
Total sample	-0.074***	1.000***	24.601	3,566
	(0.014)	(0.202)		
La Paz	-0.107***	0.986***	9.577	1,551
	(0.031)	(0.318)		
El Alto	-0.055***	0.996***	12.047	2,015
	(0.014)	(0.287)		

Instrument: Dwelling distance to an actual MT station.
Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.
$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates V_{ij} (equation 5).
α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).
Cluster robust standard errors in parentheses.
$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

Table B2: Estimation results of the relevant variables with IHS specification for the outcome variable

	β_{use}									Obs.
	Per capita expenditure			Time allocation				Income	Self-	
	Pub.	Priv.	Educ.	Study	Transp.	Lunch	Recr.	Indep.	employ	
OLS	0.180***	-0.017	0.202**	0.576***	0.199***	-0.010	0.190	-0.057	-0.015	3,566
	(0.051)	(0.027)	(0.079)	(0.164)	(0.035)	(0.017)	(0.116)	(0.209)	(0.025)	
IV-3 Stages Estimation										
Total sample	0.792*	-0.121	1.362***	2.403**	-1.553**	-0.557**	1.399	4.250**	0.483***	3,566
	(0.477)	(0.230)	(0.526)	(1.193)	(0.610)	(0.273)	(1.421)	(1.671)	(0.182)	
La Paz	-1.404	0.226	-0.322	-1.077	-0.699	-0.780	-0.178	2.400	0.204	1,551
	(1.055)	(0.532)	(1.325)	(2.384)	(0.700)	(0.541)	(1.628)	(3.839)	(0.323)	
El Alto	0.921	0.006	1.371*	3.276*	-2.242*	-0.785**	2.016	6.993**	0.798**	2,015
	(0.815)	(0.460)	(0.757)	(1.905)	(1.236)	(0.387)	(2.340)	(3.000)	(0.340)	

Instrument: Dwelling distance to actual stations.

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary Least Squares (OLS) and equation For the outcome variables related to time allocation we use the transport module. In this case, people aged 12 or over (either present or not at the time of the interview)were randomly selected to answer the questions.

Cluster robust standard errors in parentheses.

C Rates Comparison

Table C1: Trip fare comparison among different transportation modes

	Short trips	Long Trips
Cable car	3 Bs.	6 Bs.
Minibus	2 Bs.	2.60 Bs.
Trufi	2 Bs.	3.50 Bs.
Puma Katari	2 Bs.	2.30 Bs.

Notes: Information extracted from the Municipal Government of La Paz available at https://www.lapaz.bo/ciudadmaravilla/transporte/

Values are expressed in Bolivianos. The long trip tariff for MT assumes two lines are used. The rest of the tariffs reported are the minimum possible for daily trips. Night trip tariffs may be higher for some modes.

D Baseline economic activity and location of cable car stations

This section provides additional information about the economic activity at the time of the construction of the MT stations to support the validity of the instrumental variable approach. The main objective is to show that the allocation of infrastructure connected to Mi Teleférico (MT) was an ad-hoc process mostly related to the availability of space on the ground to construct a station and did not necessarily follow highly concentrated areas in terms of economic activity.

To provide an approximation of economic activity at baseline we use geocoded data from 2013 on the location of banks and markets in the cities of La Paz and El Alto.[40] The total number of markets identified is 138 and the number of bank branches is 39. Based on this information, we construct a set of variables that represent the minimum distance of each household to the closest bank, market, or both in the area. This distance is constructed considering the road structure in the city, as has been done previously in the paper, rather than using a straight line. The average distance for the survey sample to the closest bank is 5.50 km; the Std. dev. 3.71 km; the minimum is 0.015 km; and the maximum is 52.38 km. The average distance to the closest market is 1.9 km; the Std. dev. 2.3 km; the minimum is 0.01 km; and the maximum is 49.38 km.

Figure D1 shows the graphical representation of the location of households, banks, markets, and MT stations. Banks and markets are identified as Economic Units in the graph. Also, in Table D1 we present the regression results of a linear probability model where the dependent variable is a dichotomous variable of the use of MT (0/1), while the explanatory variables are the minimum distance to a Bank, to a market, or to both plus the set of explanatory variables used in all paper estimations. As can be seen, the use of MT is not statistically correlated to the distance to the closest bank, market, or both.

[40] Information was extracted from the following link managed by the Bolivian government: http://geo.gob.bo/portal/.

Table D1: Estimation results on the use of MT

VARIABLES			
Distance to the closest bank	-0.008		
	(0.006)		
Distance to the closest market		-0.005	
		(0.008)	
Distance to the closest bank or market			-0.006
			(0.009)
Observations	3,329	3,329	3,329
R-squared	0.024	0.022	0.022

Notes: Dependent variable is a binary variable on the use of MT and distances to economic units are those observed at baseline. Other covariates V_{ij} include: La Paz, gender of household head (male), age, marital status, indigenous, educational level, physical condition (disable), household asset index, owns a car, property of residence, number of household members, altitude variation between dwelling and closes MT station, accessibility to public transportation at baseline, and reception of non-labor income such as remittances and transfers. Cluster robust standard errors in parentheses.

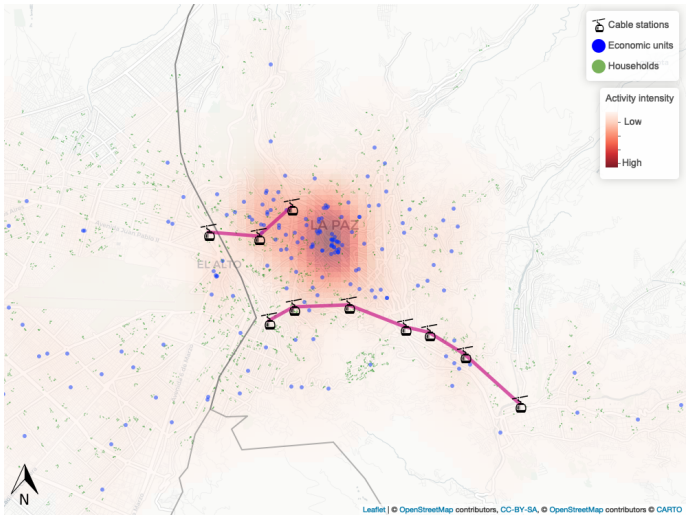

Figure D1: Spatial distribution of the sample, MT stations and baseline intensity in economic activity (banks and markets)

E Heterogeneous Effects

Table E1: Estimation of the first two stages of the preferred specification for asset index

	25% low asset index				exclude HH with 25% low asset index			
	1^{st} stage	2^{nd} stage		Obs.	1^{st} stage	2^{nd} stage		Obs.
	$\gamma_{distance}$	α_{use}	$KP-test$		$\gamma_{distance}$	α_{use}	$KP-test$	
IV-3 Stages Estimation								
Total sample	-0.048**	0.909**	4.279	824	-0.072***	1.032***	28.920	2,740
	(0.023)	(0.439)			(0.013)	(0.192)		
La Paz	-0.002	0.784	1.301	276	-0.130***	0.995***	22.457	1,274
	(0.077)	(0.687)			(0.027)	(0.210)		
El Alto	-0.039*	0.840*	3.219	548	-0.059***	1.048***	15.958	1,466
	(0.022)	(0.468)			(0.014)	(0.262)		

Instrument: Dwelling distance to an actual MT station.

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates X_i (equation 5).

α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).

Cluster robust standard errors in parentheses.

$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

See Notes included in Table 2.

Table E2: Estimation results of the relevant variables for of asset index

	β_{use}								Obs.
	Per capita expenditure			Time allocation				Income:	
	Public	Private	Education	Studying	Transport.	Lunch break	Recreation	Independent	
Panel A, Low 25%:									
OLS	6.612	-1.858	1.860	22.549**	14.231**	-0.256	1.736	199.480	824
	(6.144)	(1.399)	(1.521)	(10.906)	(5.568)	(4.526)	(6.899)	(322.636)	
IV-3 Stages Estimation									
Total sample	36.459	-4.634	9.519	99.070	-124.036	-118.473*	84.001	3,348.034	824
	(71.372)	(17.564)	(11.660)	(122.520)	(100.193)	(65.441)	(95.677)	(3,512.029)	
La Paz	-386.170	18.670	-54.854	-471.865	197.732	-186.544	-369.825	-1,102.034	276
	(494.118)	(64.347)	(104.243)	(823.255)	(250.302)	(172.825)	(397.511)	(7,474.201)	
El Alto	267.086	-6.096	6.616	103.576	-161.275	-179.919	114.592	4,761.562	548
	(194.274)	(13.037)	(15.534)	(179.801)	(137.555)	(112.622)	(155.398)	(6,195.975)	
Average outcome variable									
Total sample	69.271	4.878	3.417	50.121	85.539	105.460	42.821	1,476.695	824
La Paz	82.496	8.174	3.561	70.505	77.942	103.177	37.690	1,530.590	276
El Alto	62.599	3.214	3.344	39.836	89.372	106.612	45.410	1,449.502	548
Panel B, Excluding low 25%:									
OLS	9.752**	-10.975***	1.920	24.361**	12.218***	-3.309*	0.220	57.251	2,740
	(4.077)	(3.531)	(1.866)	(10.538)	(1.957)	(1.725)	(2.741)	(257.387)	
IV-3 Stages Estimation									
Total sample	65.709**	-63.320***	15.103	109.206*	-58.481***	-58.649**	13.640	2,941.025	2,740
	(32.095)	(23.729)	(12.129)	(64.965)	(22.095)	(27.591)	(31.472)	(2,681.901)	
La Paz	-32.750	-34.834	-5.734	27.184	-6.538	-53.217**	-25.570	2,276.343	1,274
	(35.533)	(42.675)	(17.769)	(108.869)	(44.124)	(25.036)	(50.265)	(1,864.772)	
El Alto	40.239	-94.794**	22.551	106.783	-95.922**	-70.258**	28.360	7,250.456	1,466
	(51.854)	(45.742)	(14.204)	(89.828)	(37.618)	(30.663)	(51.382)	(6,292.628)	
Average outcome variable									
Total sample	94.468	31.677	10.242	93.161	87.446	105.766	49.223	1,941.964	2,740
La Paz	103.164	38.815	10.436	104.568	86.167	104.202	50.067	1,636.170	1,274
El Alto	86.911	25.475	10.073	83.247	88.557	107.125	48.489	2,207.708	1,466

See Notes included in Tables 3 to 6.

Table E3: Estimation of the first two stages for a sample of male and female household heads

	Male				Female			
	1^{st} stage	2^{nd} stage		Obs.	1^{st} stage	2^{nd} stage		Obs.
	$\gamma_{distance}$	α_{use}	$KP-test$		$\gamma_{distance}$	α_{use}	$KP-test$	
IV-3 Stages Estimation								
Total sample	-0.071***	1.000***	16.933	2,751	-0.086***	0.987***	15.963	815
	(0.016)	(0.243)			(0.019)	(0.247)		
La Paz	-0.100***	0.991**	6.662	1,150	-0.119*	0.989*	3.501	401
	(0.036)	(0.384)			(0.062)	(0.529)		
El Alto	-0.052***	1.077***	9.119	1,601	-0.066**	0.815	3.115	414
	(0.017)	(0.357)			(0.027)	(0.462)		

Instrument: Dwelling distance to actual MT stations.

Covariates V_{ij} include: La Paz, marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates V_{ij} (equation 5).

α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).

Cluster robust standard errors in parentheses.

$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

Table E4: Estimation results for the relevant variables by gender of the household head

	β_{use}								Obs.
	Per capita expenditure			Time allocation				Income:	
	Public	Private	Education	Studying	Transport.	Lunch break	Recreation	Independent	
Panel A, Male Head of Household:									
OLS	9.475**	-12.601***	1.284	18.073*	12.965***	-2.666	-1.758	60.885	2,751
	(4.206)	(3.648)	(1.168)	(9.135)	(2.091)	(1.891)	(2.416)	(279.358)	
IV-3 Stages Estimation									
Total sample	78.469**	-57.827**	16.916**	127.131*	-73.789**	-53.090**	13.223	3,513.252	2,751
	(34.596)	(25.248)	(7.711)	(75.029)	(30.981)	(25.245)	(34.878)	(2,599.202)	
La Paz	-64.979	-30.384	0.361	-50.944	-27.750	-99.850	4.034	3,754.456	1,150
	(53.611)	(56.977)	(19.021)	(165.834)	(43.897)	(61.814)	(51.228)	(2,726.653)	
El Alto	71.160	-83.195*	14.750	120.520	-83.035	-65.801**	8.526	6,263.994	1,601
	(70.745)	(47.094)	(10.842)	(90.039)	(50.864)	(29.488)	(56.598)	(6,327.176)	
Average outcome variable									
Whole sample	86.245	29.964	7.813	77.903	86.958	105.767	47.555	1,933.012	2,751
La Paz	97.090	38.946	8.089	93.252	84.550	105.157	48.835	1,745.157	1,150
El Alto	78.455	23.512	7.614	66.877	88.688	106.205	46.636	2,067.949	1,601
Panel B, Female Head of Household:									
OLS	12.757**	1.868	4.409	49.202***	9.479**	-3.025	6.777	221.502	815
	(5.103)	(3.136)	(5.695)	(16.422)	(4.174)	(3.201)	(5.429)	(254.318)	
IV-3 Stages Estimation									
Total sample	20.518	-20.898*	13.146	131.672**	-57.683*	-61.642*	93.902**	1,320.293	815
	(36.478)	(12.703)	(18.922)	(62.344)	(31.492)	(37.282)	(37.899)	(2,050.942)	
La Paz	-73.647	-28.668	-47.527	-81.343	33.121	-0.140	-22.036	-1,170.660	401
	(67.939)	(40.833)	(33.373)	(180.765)	(64.056)	(36.364)	(64.256)	(1,800.207)	
El Alto	-24.267	-16.989	3.603	71.076	-127.445	-116.216	158.468	1,460.357	414
	(127.922)	(33.854)	(39.327)	(194.948)	(82.491)	(91.078)	(160.148)	(3,514.387)	
Average outcome variable									
Whole sample	96.686	10.300	11.525	101.043	87.160	105.452	48.362	1,500.630	815
La Paz	106.304	17.272	12.419	113.491	85.125	100.756	45.050	1,250.682	401
El Alto	87.371	3.548	10.659	88.986	89.130	110.000	51.570	1,742.729	414

Instrument: Dwelling distance to actual MT stations.
See Notes included in Tables 3 to 6.

F Robustness Tests

F.1 Homeowners Sample and Different Definitions of MT Use

Table F1: Estimation of the first two stages for robustness tests

	1^{st} stage	2^{nd} stage		Obs.
	$\gamma_{distance}$	α_{use}	$KP-test$	
Panel A				
Owner	-0.068***	1.018***	13.787	2,342
	(0.012)	(0.173)		
No owner	-0.086***	1.010***	24.930	1,224
	(0.017)	(0.202)		
Panel B				
Annual use	-0.045***	1.023***	8.868	3,566
	(0.016)	(0.343)		
Weekly use	-0.060***	1.003***	33.845	3,566
	(0.010)	(0.172)		

Instrument: Dwelling distance to actual stations.
Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.
$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates V_{ij} (equation 5).
α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).
Cluster robust standard errors in parentheses.
$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

Table F2: Robustness test for relevant variables

	β_{use}									Obs.
	Per capita expenditure			Time allocation				Income	Self-	
	Public	Private	Educ.	Study	Transport.	Lunch	Recr.	Indep.	employ	
Panel A										
Owner	68.669**	-58.004**	21.339*	161.957***	-80.051***	-51.320***	29.867	3,895.982**	0.513***	2,342
	(28.354)	(25.059)	(11.075)	(59.000)	(26.056)	(16.375)	(25.823)	(1,884.751)	(0.194)	
No owner	50.033	-32.807	9.512	56.123	-53.097**	-50.418***	32.921	2,237.591	0.371*	1,224
	(31.937)	(25.672)	(8.357)	(47.241)	(23.020)	(19.163)	(27.919)	(2,578.271)	(0.209)	
Panel B										
Annual use	111.397***	-63.285**	23.721**	212.156***	-92.147***	-72.573***	54.839*	3,079.938*	0.753***	3,566
	(35.254)	(25.761)	(11.746)	(65.376)	(28.831)	(21.306)	(28.883)	(1,864.421)	(0.238)	
Weekly use	124.949**	-115.079***	34.640*	171.955**	-150.460***	-104.475***	59.392	7,497.363**	0.984***	3,566
	(51.133)	(44.116)	(18.214)	(84.625)	(45.818)	(31.533)	(42.563)	(3,668.065)	(0.341)	
Average outcome variable										
Owner	89.725	29.305	9.981	92.378	87.950	106.178	48.123	1,770.403	0.437	2,342
No owner	86.539	18.131	6.135	65.613	85.195	104.771	47.006	1,956.247	0.433	1,224
Annual & Weekly use	88.631	25.470	8.661	83.191	87.004	105.695	47.740	1,834.192	0.436	3,566

Instrument: Dwelling distance to actual stations.

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary Least Squares (OLS) and equation (7) from process 18.1 proposed by Wooldridge, 2002 (IV-3 stages).

For the outcome variables related to time allocation we use the transport module. In this case, people aged 12 or over (either present or not at the time of the interview)were randomly selected to answer the questions.

Cluster robust standard errors in parentheses.

F.2 Results from a two-stage IV model

Table F3: First stage for preferred specification

	$\alpha_{distance}$	$KP-test$	Obs.
Total sample	-0.025***	13.720	3,566
	(0.003)	0.000	
La Paz	-0.038***	16.139	1,551
	(0.009)	0.000	
El Alto	-0.018***	17.863	2,015
	(0.004)	0.000	

Instrument: Dwelling distance to actual stations.

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

Cluster robust standard errors in parentheses.

$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

Table F4: Two-stage IV results for relevant variables

	β_{use}									Obs.
	Per capita expenditure			Time allocation				Income	Self-	
	Pub.	Priv.	Educ.	Study	Transp.	Lunch	Recr.	Indep.	employ	
OLS	10.114***	-9.268***	1.926	25.448***	12.111***	-2.752**	0.037	111.359	-0.015	3,566
	(2.974)	(2.858)	(1.403)	(5.817)	(1.855)	(1.396)	(2.476)	(186.314)	(0.017)	
IV Estimation										
Total sample	71.636***	-45.364***	17.264**	127.767***	-68.131***	-51.214***	38.351**	2,897.112**	0.517***	3,566
	(21.485)	(16.920)	(7.196)	(39.627)	(18.247)	(12.833)	(19.306)	(1,408.849)	(0.149)	
La Paz	-37.474	-39.413	-11.461	-33.635	0.038	-66.223	10.202	1,201.437	0.201	1,551
	(46.959)	(40.365)	(19.330)	(143.605)	(42.890)	(40.753)	(47.133)	(2,047.884)	(0.330)	
El Alto	65.743	-92.949**	32.686**	170.896	-120.738*	-73.431**	44.803	7,051.463	0.982***	2,015
	(64.558)	(37.709)	(13.730)	(105.781)	(61.685)	(30.794)	(67.211)	(5,592.394)	(0.333)	
Average outcome variable										
Total sample	88.631	25.470	8.661	83.191	87.004	105.695	47.740	1,834.192	0.436	3,566
La Paz	99.472	33.342	9.208	98.485	84.698	104.019	47.856	1,617.314	0.375	1,551
El Alto	80.287	19.410	8.240	71.419	88.779	106.985	47.650	2,001.130	0.483	2,015

Instrument: Dwelling distance to actual stations.

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary Least Squares (OLS) and equation

For the outcome variables related to time allocation we use the transport module. In this case, people aged 12 or over (either present or not at the time of the interview)were randomly selected to answer the questions.

Cluster robust standard errors in parentheses.

F.3 Results using quadratic terms

Table F5: Estimation of the first two stages of the preferred specification, including a squared instrument

	1^{st} stage		2^{nd} stage		Obs.
	$\gamma_{distance}$	$\gamma_{distance^2}$	α_{use}	$KP-test$	
Total sample	-0.177***	0.008***	0.975***	47.670	3,566
	(0.036)	(0.003)	(0.141)		
La Paz	-0.270*	0.026	1.015**	7.272	1,551
	(0.147)	(0.022)	(0.376)		
El Alto	-0.187***	0.010***	0.953***	22.911	2,015
	(0.049)	(0.003)	(0.199)		

Instruments: Dwelling distance and distance^2 to an actual MT station.
Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.
$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates V_{ij} (equation 5).
α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).
Cluster robust standard errors in parentheses.
$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

Table F6: Estimation results of the relevant variables, including a squared instrument

	β_{use}								Obs.
	Per capita expenditure			Time allocation				Income	
	Public	Private	Educ.	Studying	Transport.	Lunch break	Recr.	Indep.	
OLS	10.114***	-9.268***	1.926	25.448***	12.111***	-2.752	0.037	111.359	3,566
	(3.635)	(2.855)	(1.664)	(9.000)	(2.074)	(1.728)	(2.681)	(205.917)	
IV-3 Stages Estimation									
Total sample	29.084	-52.328**	9.118	62.566	-51.226**	-44.613**	19.066	2,532.041	3,566
	(22.698)	(20.628)	(8.834)	(52.380)	(24.761)	(18.862)	(28.616)	(2,206.570)	
La Paz	-69.069	-13.042	5.204	43.538	-5.484	-73.419**	-29.445	2,568.084	1,551
	(44.971)	(43.030)	(13.294)	(86.249)	(34.494)	(32.269)	(47.058)	(1,866.314)	
El Alto	32.599	-81.773***	8.841	21.586	-63.336	-38.114*	18.240	3,686.146	2,015
	(42.823)	(27.329)	(12.743)	(73.703)	(46.464)	(20.704)	(52.341)	(4,517.991)	
Average outcome variable									
Total sample	88.631	25.470	8.661	83.191	87.004	105.695	47.740	1,834.192	3,566
La Paz	99.472	33.342	9.208	98.485	84.698	104.019	47.856	1,617.314	1,551
El Alto	80.287	19.410	8.240	71.419	88.779	106.985	47.650	2,001.130	2,015

Instrument: Dwelling distance and distance^2 to an actual MT station.

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary Least Squares (OLS) and equation (7) from process 18.1 proposed by Wooldridge, 2002 (IV-3 stages).

For the outcome variables related to time allocation we use the transport module. In this case, people aged 12 or over (either present or not at the time of the interview)were randomly selected to answer the questions.

Cluster robust standard errors in parentheses.

F.4 Results without including control variables

Table F7: Estimation of the first two stages of preferred specification with no control variables

	1^{st} stage	2^{nd} stage		Obs.
	$\gamma_{distance}$	α_{use}	$KP-test$	
Total sample	-0.058***	1.023***	29.623	3,566
	(0.011)	(0.188)	0.000	
La Paz	-0.068**	1.023**	5.596	1,551
	(0.029)	(0.432)	0.032	
El Alto	-0.072***	1.041***	24.864	2,015
	(0.015)	(0.209)	0.000	

Instrument: Dwelling distance to actual stations.
$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates V_{ij} (equation 5).
α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).
Cluster robust standard errors in parentheses.
$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

Table F8: Estimation of the relevant variables with no control variables

	β_{use}								Obs.
	Per capita expenditure			Time allocation				Income	
	Public	Private	Education	Studying	Transport.	Lunch break	Recreation	Indep.	
OLS	14.932***	-3.409	3.700**	32.574***	12.651***	-3.419*	3.831	251.996	3,566
	(3.059)	(2.420)	(1.475)	(8.357)	(2.174)	(1.972)	(2.687)	(167.075)	
IV-3 Stages Estimation									
Total sample	191.148***	70.821	20.956***	162.643***	-72.319***	-51.641*	57.326**	375.298	3,566
	(36.793)	(46.314)	(8.094)	(51.053)	(23.746)	(26.531)	(25.875)	(1,097.407)	
La Paz	91.942	31.209	-2.593	-90.773	-31.765	-76.488*	97.432	1,366.069	1,551
	(76.338)	(97.608)	(22.668)	(162.516)	(49.593)	(39.820)	(78.971)	(2,177.825)	
El Alto	143.005***	14.718	24.325***	103.484**	-71.534***	-39.528	56.909*	2,240.316	2,015
	(22.458)	(24.556)	(8.907)	(50.870)	(24.735)	(27.153)	(33.281)	(2,109.045)	
Average outcome variable									
Whole sample	88.631	25.470	8.661	83.191	87.004	105.695	47.740	1,834.192	3,566
La Paz	99.472	33.342	9.208	98.485	84.698	104.019	47.856	1,617.314	1,551
El Alto	80.287	19.410	8.240	71.419	88.779	106.985	47.650	2,001.130	2,015

Instrument: Dwelling distance to an actual MT station.

β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary Least Squares (OLS) and equation (7) from process 18.1 proposed by Wooldridge, 2002 (IV-3 stages).

For the outcome variables related to time allocation we use the transport module. In this case, people aged 12 or over (either present or not at the time of the interview) were randomly selected to answer the questions.

Cluster robust standard errors in parentheses.

F.5 Results restricting sample to less than 1.5 & 5 Km from MT stations

Table F9: Estimation of the first two stages for a sample of households living less than 1.5 & 5 km from a MT station

	less than 1.5 km				less than 5 km			
	1^{st} stage	2^{nd} stage		Obs.	1^{st} stage	2^{nd} stage		Obs.
	$\gamma_{distance}$	α_{use}	$KP-test$		$\gamma_{distance}$	α_{use}	$KP-test$	
IV-3 Stages Estimation								
Total sample	-0.553***	1.075***	12.086	807	-0.119***	1.027***	9.658	2,263
	(0.176)	(0.309)			(0.040)	(0.331)		
La Paz	-0.742***	1.022***	22.502	647	-0.139**	1.013**	5.835	1,383
	(0.156)	(0.215)			(0.058)	(0.419)		
El Alto	0.668*	0.844	2.191	160	-0.089*	0.965	2.690	880
	(0.390)	(0.570)			(0.053)	(0.588)		

Instrument: Dwelling distance to actual MT stations.

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates V_{ij} (equation 5).

α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).

Cluster robust standard errors in parentheses.

$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

Table F10: Estimation results for the relevant variables with a sample of households living less than 1.5 & 5 km from a MT station

	β_{use}								Obs.
	Per capita expenditure			Time allocation				Income:	
	Public	Private	Education	Studying	Transport.	Lunch break	Recreation	Independent	
Panel A, Less than 1.5 km:									
OLS	10.536*	-6.338*	3.314	10.090	9.299**	3.516	8.428	600.708	807
	(5.205)	(3.049)	(2.440)	(10.685)	(3.381)	(2.650)	(6.850)	(404.502)	
Total sample	-68.417*	22.220	11.236	215.067***	4.333	-30.942	34.008	4,150.780	807
	(39.049)	(42.299)	(17.162)	(42.245)	(20.858)	(33.034)	(30.668)	(3,234.218)	
La Paz	-69.251**	18.915	10.026	228.156***	16.277	-9.324	19.865	2,995.009	647
	(30.576)	(36.325)	(13.593)	(37.512)	(18.479)	(19.078)	(20.204)	(2,480.530)	
El Alto	-60.338	-35.472	-29.596*	319.229	99.797***	144.472*	-32.307	-11,640.668	160
	(44.786)	(84.117)	(16.730)	(257.622)	(25.420)	(83.500)	(57.145)	(12,171.108)	
Average outcome variable									
Total sample	103.208	27.431	9.194	91.214	80.414	99.418	48.364	1782.681	807
La Paz	100.790	29.706	9.858	95.549	83.221	97.883	47.249	1,678.114	647
El Alto	112.984	18.232	6.510	73.688	69.062	105.625	52.875	2,205.521	160
Panel B, Less than 5 km:									
OLS	9.604***	-10.840***	0.935	18.863*	10.648***	-2.228	2.838	-21.175	2,263
	(3.151)	(3.669)	(2.174)	(10.634)	(2.875)	(1.923)	(3.038)	(299.445)	
Total sample	-52.675	-21.408	-7.209	-73.145	-53.627	-58.488*	13.620	2,319.744	2,263
	(43.016)	(32.258)	(21.935)	(84.854)	(42.215)	(30.612)	(41.002)	(3,129.638)	
La Paz	-51.722	-10.523	1.890	3.552	-21.892	-81.503*	-28.141	1,885.189	1,383
	(53.230)	(48.644)	(16.306)	(98.842)	(41.367)	(45.330)	(62.937)	(2,243.858)	
El Alto	-106.441	-79.688	-45.169	-252.561	-163.427	-58.771	58.550	2,854.615	880
	(92.065)	(63.894)	(73.342)	(187.265)	(136.506)	(62.490)	(80.603)	(10,302.520)	
Average outcome variable									
Total sample	97.829	28.002	9.556	90.194	84.252	104.465	50.155	1,853.154	2,263
La Paz	101.412	34.506	8.738	96.110	84.633	104.234	49.801	1,619.995	1,383
El Alto	92.198	17.779	10.841	80.898	83.653	104.830	50.710	2,219.583	880

Instrument: Dwelling distance to actual MT stations.
See Notes included in Tables 3 to 6.

G Bootstrap Standard Errors

Table G1: Bootstrap estimates of the first two stages of the preferred specification

	1^{st} stage $\gamma_{distance}$	2^{nd} stage α_{use}	Obs.
Total sample	-0.074***	1.000***	3,566
	(0.014)	(0.205)	
La Paz	-0.107***	0.987***	1,551
	(0.032)	(0.327)	
El Alto	-0.055***	0.994***	2,015
	(0.014)	(0.293)	

Instrument: Dwelling distance to actual MT stations.

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates V_{ij} (equation 5).

α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).

Bootstrap cluster robust standard errors in parentheses with 1,000 repetitions.

Table G2: Estimation results for the relevant variables with bootstrap

	β_{use}								Obs.
	Per capita expenditure			Time allocation				Income:	
	Public	Private	Education	Studying	Transport.	Lunch break	Recreation	Independent	
OLS	10.083***	-9.255***	1.932	25.484**	12.087***	-2.746	0.026	109.678	3,566
	(3.740)	(3.013)	(1.722)	(9.206)	(2.156)	(1.783)	(2.787)	(213.884)	
IV-3 Stages Estimation									
Total sample	62.521***	-50.985***	15.930*	120.664*	-70.688**	-52.502**	32.644	3,083.652	3,566
	(27.120)	(19.517)	(9.496)	(63.967)	(28.656)	(25.738)	(32.962)	(2,390.472)	
La Paz	-56.612	-29.643	-11.530	-38.021	-9.448	-68.382*	-4.041	2,101.520	1,551
	(47.616)	(41.338)	(19.224)	(150.300)	(43.964)	(42.484)	(47.602)	(2,104.329)	
El Alto	62.611	-80.868**	16.006	140.382	-95.568*	-69.025**	32.987	6,241.343	2,015
	(61.041)	(38.770)	(11.782)	(94.969)	(54.885)	(32.474)	(60.711)	(5,981.036)	

Instrument: Dwelling distance to actual MT stations.

Covariates V_{ij} include: La Paz, gender of household head (male), age, married or cohabiting, separated or divorced, widowed, indigenous, complete primary and incomplete secondary education, complete secondary and technical, incomplete and complete university, master's and Ph.D., physical condition (disable), asset index, own automobile, owner of the property of residence, number of household members, altitude variation, accessibility to public transportation, and reception of other kind of income such as remittances and transfers.

β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary Least Squares (OLS) and equation (7) from process 18.1 proposed by Wooldridge, 2002 (IV-3 stages).

For the outcome variables related to time allocation we use the transport module. In this case, people aged 12 or over (either present or not at the time of the interview)were randomly selected to answer the questions.

Bootstrap cluster robust standard errors in parentheses with 1,000 repetitions.

H Alternative control group analysis: Future stations

An alternative way to construct a control group would be to consider households that live near future MT stations. The sample size is limited for this analysis, but as a robustness check, we maintain the sample of households located less than 0.5 km from an actual or future MT station. We define T as 1 if the household is located in less than 0.5 km to an actual MT station, and 0 otherwise.

$$T_i = \beta_0 + \beta_T T_i + X_i + e_i \tag{9}$$

Table H1: Estimation results of the relevant variables, control group from future stations

	β_T								Obs.
	Per capita expenditure			Time allocation				Income:	
	Public	Private	Education	Studying	Transport.	Lunch break	Recreation	Independent	
Treatment < 500 **mts.**									
Treatment	-15.082	-3.670	7.302	19.543	-0.388	-14.600*	3.843	-138.595	300
	(8.255)	(8.700)	(3.798)	(13.803)	(9.504)	(5.441)	(15.965)	(673.024)	
Constant	138.690**	39.416	24.393*	176.376*	60.678*	77.034***	74.372*	4612.400	
	(39.946)	(22.910)	(9.769)	(74.899)	(21.318)	(14.918)	(27.192)	(2458.038)	
R-squared	0.084	0.402	-0.002	0.041	0.075	0.140	0.039	0.035	
Average outcome variable									
Sample	94.584	26.219	7.068	122.400	82.567	103.383	58.850	1,064.234	300

Covariates V_{ij} include: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

β_T coefficient corresponds to the estimation of equation (9) obtained by Ordinary Least Squares (OLS).

For the outcome variables related to time allocation we use the transport module. In this case, people aged 12 or over (either present or not at the time of the interview)were randomly selected to answer the questions.

Cluster robust standard errors in parentheses.

I Using night light data as extra regressors

Table I1: Estimation of the first two stages of preferred specification controlling for ex-ante economic activity

	1^{st} stage		2^{nd} stage			Obs.
	$\gamma_{distance}$	$\beta_{\overline{NL}}$	α_{use}	$\beta_{\overline{NL}}$	$KP-test$	
IV-3 Stages Estimation						
Total sample	-0.058***	0.005*	0.966***	0.000	13.803	3,566
	(0.015)	(0.003)	(0.260)	(0.001)	0.001	
La Paz	-0.100***	0.001	0.980**	-0.000	6.868	1,551
	(0.034)	(0.005)	(0.374)	(0.002)	0.019	
El Alto	-0.042***	0.004	0.989**	0.000	7.778	2,015
	(0.016)	(0.003)	(0.355)	(0.001)	0.015	

Covariates included are similar to those of the baseline model (V_{ij}). In addition, a control for economic activity, approximated by the average night light data for the years 2012 and 2013, is included and represented by $\beta_{\overline{NL}}$.

$\gamma_{distance}$ refers to the effect of distance to the nearest station (Z_{ij}) on the use of MT (T_{ij}), obtained from the binary model (Probit) on covariates V_{ij} (equation 5).

α_{use} corresponds to the effect of the predicted probability of using MT ($\hat{T}_{ij}$, from the previous step) on T_{ij}, according to equation (6).

Cluster robust standard errors in parentheses.

See Table 2 for a comparison of the model without luminosity control variables.

$KP-test$ refers to the Kleibergen-Paap robust rk Wald F statistic obtained with `ivreg2` package in `Stata`.

Table I2: Estimation results of the relevant variables, adding average night light data as a control variable

		Per capita expenditure			Time allocation				Income:	Obs.
		Public	Private	Education	Studying	Transport.	Lunch break	Recreation	Independent	
OLS	β_{use}	9.911**	-9.004***	2.071	24.642**	12.486***	-1.748	-0.433	92.597	3,566
		(3.739)	(3.057)	(1.667)	(9.100)	(2.281)	(1.813)	(2.860)	(209.606)	
	$\beta_{\overline{NL}}$	0.058	-0.076	-0.042	0.230	-0.107	-0.287**	0.134	5.362	
		(0.103)	(0.115)	(0.042)	(0.231)	(0.117)	(0.115)	(0.130)	(4.190)	
IV-3 Stages Estimation										
Total sample	β_{use}	85.264*	-69.057	34.540**	136.263	-112.020***	-28.694	23.586	4,181.354	3,566
		(47.020)	(46.599)	(16.283)	(90.776)	(39.759)	(27.811)	(43.370)	(4,026.382)	
	$\beta_{\overline{NL}}$	-0.190	0.122	-0.149*	-0.138	0.303*	-0.198	0.055	-8.109	
		(0.205)	(0.233)	(0.077)	(0.331)	(0.176)	(0.130)	(0.173)	(14.179)	
La Paz	β_{use}	-30.377	-5.841	15.040	-6.427	-8.102	-44.836	5.426	1,260.485	1,551
		(49.685)	(64.256)	(23.338)	(141.671)	(53.590)	(30.987)	(56.902)	(3,001.510)	
	$\beta_{\overline{NL}}$	-0.057	-0.271	-0.214***	-0.219	0.066	-0.172	0.038	-0.476	
		(0.226)	(0.304)	(0.065)	(0.483)	(0.190)	(0.139)	(0.204)	(11.553)	
El Alto	β_{use}	135.468	-153.659**	53.126*	184.614	-180.893**	-28.981	18.787	9,883.623	2,015
		(92.519)	(64.245)	(31.623)	(153.969)	(91.184)	(45.635)	(90.985)	(9,465.029)	
	$\beta_{\overline{NL}}$	-0.378	0.329	-0.111	-0.074	0.326	-0.241	0.141	-15.363	
		(0.258)	(0.224)	(0.133)	(0.374)	(0.274)	(0.214)	(0.276)	(23.837)	
Average outcome variable										
Total sample		88.631	25.470	8.661	83.191	87.004	105.695	47.740	1,834.192	3,566
La Paz		99.472	33.342	9.208	98.485	84.698	104.019	47.856	1,617.314	1,551
El Alto		80.287	19.410	8.240	71.419	88.779	106.985	47.650	2,001.130	2,015

Instrument: Dwelling distance to actual MT stations.
Same covariates as those of the baseline model are included here (V_{ij}).
β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary least squares (OLS) and equation (7) from process 18.1 proposed by Wooldridge, 2002 (IV-3 stages).
$\beta_{\overline{NL}}$ represents the estimated effect of the average luminosity for the years 2012 and 2013.
For the outcome variables related to time allocation we use the transport module if the survey. In this case, people aged 12 or over (either present or not at the time of the interview) were randomly selected to answer the questions.
See Tables 3, 4, 5, and 6 for a comparison of the model without luminosity control variables.

J Modal Change Analysis

Table J1: Transport mode substitution analysis for relevant variables

	β_{use}								
	Per capita expenditure			Time allocation				Income:	
	Public	Private	Edu.	Study	Transport.	Lunch	Recreation	Indep.	Self-employ
β_{use}	78.636**	-63.589**	20.516*	154.529*	-94.604**	-68.286*	43.097	3,832.902	0.623***
	(36.498)	(25.833)	(11.991)	(79.441)	(36.929)	(34.969)	(41.043)	(3,078.548)	(0.228)
Available	0.878*	-0.891**	0.197	1.801*	-1.455***	-1.043**	0.546	50.791	0.008**
	(0.486)	(0.365)	(0.169)	(1.048)	(0.531)	(0.487)	(0.500)	(42.179)	(0.004)
β_{use} × Available	-2.291*	1.831**	-0.657	-4.887*	3.404***	2.271*	-1.506	-110.576	-0.020**
	(1.339)	(0.923)	(0.420)	(2.595)	(1.305)	(1.248)	(1.354)	(112.020)	(0.009)
Mean	64.273**	-54.034***	15.840*	123.150*	-74.786**	-55.798**	33.342	3,225.128	0.504***
	(28.086)	(20.429)	(9.446)	(63.927)	(29.794)	(27.379)	(32.177)	(2,386.344)	(0.177)
90^{th} p.	41.902***	-39.151***	8.556	74.277*	-43.919**	-36.346**	18.147	2,278.496*	0.320***
	(15.991)	(12.747)	(5.697)	(40.943)	(20.134)	(16.093)	(18.691)	(1,370.143)	(0.108)
Median	70.159**	-57.950**	17.756*	136.009*	-82.908**	-60.915**	37.339	3,474.193	0.553***
	(31.503)	(22.619)	(10.482)	(70.244)	(32.665)	(30.472)	(35.800)	(2,668.122)	(0.198)
Average outcome variable									
Total sample	88.631	25.470	8.661	83.191	87.004	105.695	47.740	1,834.192	0.436
La Paz	99.472	33.342	9.208	98.485	84.698	104.019	47.856	1,617.314	0.375
El Alto	80.287	19.410	8.240	71.419	88.779	106.985	47.650	2,001.130	0.483

Instrument: Dwelling distance to actual stations.

Covariates V_{ij} included: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary Least Squares (OLS) and equation (7) from process 18.1 proposed by Wooldridge, 2002 (IV-3 stages).

For the outcome variables related to time allocation we use the transport module. In this case, people aged 12 or over (either present or not at the time of the interview)were randomly selected to answer the questions.

Cluster robust standard errors in parentheses.

Table J2: Car ownership analysis for relevant variables

	β_{use}								
	Per capita expenditure			Time allocation				Income	Self-
	Public	Private	Education	Studying	Transp.	Lunch break	Recreation	Indep.	employ
β_{use}	70.350**	-52.719**	17.738*	134.870*	-82.109***	-60.163**	35.933	3,655.638	0.561***
	(29.363)	(20.991)	(10.233)	(71.686)	(31.110)	(27.908)	(37.457)	(2,741.239)	(0.207)
Car	9.728	107.226***	5.140	42.301	-39.795***	-21.539*	9.346	2,821.810*	0.347***
	(14.967)	(8.359)	(4.434)	(27.054)	(12.409)	(11.445)	(15.530)	(1,443.286)	(0.079)
β_{use} × car	-55.917*	14.573	-13.185	-105.210	81.768***	56.077**	-24.573	-4.3e+03	-0.547***
	(32.881)	(20.418)	(9.333)	(71.067)	(29.485)	(27.457)	(37.298)	(3,080.556)	(0.205)
Mean	67.906**	-46.274**	17.312*	131.542*	-79.888***	-58.336**	35.127	3,578.659	0.550***
	(28.419)	(20.157)	(9.968)	(69.365)	(30.192)	(27.049)	(36.255)	(2,654.302)	(0.200)
99^{th} p.	24.161*	69.080***	9.693	71.961**	-40.136***	-25.625**	20.706	2,200.770*	0.360***
	(13.195)	(8.980)	(6.738)	(31.724)	(14.247)	(11.916)	(15.305)	(1,150.942)	(0.083)
Median	70.350**	-52.719**	17.738*	134.870*	-82.109***	-60.163**	35.933	3,655.638	0.561***
	(29.363)	(20.991)	(10.233)	(71.686)	(31.110)	(27.908)	(37.457)	(2,741.239)	(0.207)
Car=1	24.161*	69.080***	9.693	71.961**	-40.136***	-25.625**	20.706	2,200.770*	0.360***
	(13.195)	(8.980)	(6.738)	(31.724)	(14.247)	(11.916)	(15.305)	(1,150.942)	(0.083)
Average outcome variable									
Total sample	88.631	25.470	8.661	83.191	87.004	105.695	47.740	1,834.192	0.436
La Paz	99.472	33.342	9.208	98.485	84.698	104.019	47.856	1,617.314	0.375
El Alto	80.287	19.410	8.240	71.419	88.779	106.985	47.650	2,001.130	0.483

Instrument: Dwelling distance to actual stations.

Covariates V_{ij} included: La Paz, gender of household head (male), marital status, indigenous, educational level, physical condition (disable), household asset index, owns car, property of residence, number of household members, altitude variation between dwelling and closest MT station, accessibility to public transportation at baseline, and received non-labor income such as remittances and transfers.

β_{use} coefficient corresponds to the estimation of equation (4) obtained by Ordinary Least Squares (OLS) and equation (7) from process 18.1 proposed by Wooldridge, 2002 (IV-3 stages).

Cluster robust standard errors in parentheses.

K Cost-benefit analysis

To calculate cost-benefit ratios (CBRs), we construct two different models that vary across the definition of benefits. Following the transport literature, the main benefit considered is households' average time savings, which is obtained from the estimated results of our main model. To monetize the value of time savings we use different levels of the usage of Mi Telef´erico as defined in the following sections. In the first model, time savings are the main benefits considered. In the second model, we add transport expenditure savings. In the analysis, we consider the following assumptions:

- Number of working days per month: 20
- Number of minutes per working day: $8hs \times 60$ min $= 480$ min
- Minimum daily wage: \$60. Source: Estado Plurinacional de Bolivia (2016).
- Minimum daily wage per minute: $\$60/480min = \$0.125$ per min
- Average monthly salary obtained from the survey: \$2,897
  - Salary per minute: $\$2,897/20/480 = \$0.30$ per min
- Monthly average net income for independent worker: \$2,042.
  - Net income for independent worker per minute: $\$2,042/20/480 = \$0.21$
- Average income per minute: $(\$0.30 + \$0.21)/2 = \$0.26$
- Users of Mi Teleférico per day: 66,491; users by year: 24,269,215

In both models, costs correspond to those of providing the service (obtained from the Operational Report Mi Teleférico, 2016). These costs already include the debt service; therefore, no project investment costs are included.

- Total costs per trip: \$4.18
  - Service Provision in 2016: \$101,365,610
  - Provision costs per trip: $\$101,365,610/24,269,215 = \$4.18$

K.1 Baseline

The baseline scenario values time savings obtained from the average labor income reported by the household heads in the survey, giving two trips per day. This includes data from both wages and self-employed income. In addition, we use the average effect estimated for time savings in transportation, which is equivalent to 70 minutes per day (a lower bound estimate if we ignore time saved on the lunch break). Taking all of this information into account, the CBRs presented in Table 7 indicate that benefits are almost 2.16 times the project costs.

1. CBR of model 1: \$9.00/\$4.18 = 2.16
    - Total benefits per trip: \$9.00
        - Savings of travel times obtained from the main regression: 70 min.
        - Number of travels per day: 2
        - Value of saving travel time per day and per trip: (\$0.26 × 70)/2 = \$9.00
2. CBR of model 2: \$8.62/\$4.18 = 2.06
    - Total benefits per trip: \$9.00 − \$0.37 = \$8.62
        - Reduction of monthly private transportation expenses: \$55.45
        - Increase in monthly public transport expenses: \$70.37
        - Net savings of transportation expenses: -\$14.92
        - Net savings of transport costs per trip per day: -\$0.37

K.2 Scenario 1

Changing the number of trips to four, while keeping the rest constant, puts the CBRs between 1.08 and .99.

1. Model 1: this scenario considers that the person might have four trips per day. Therefore, the total benefits are equal to (\$0.26 × 70)/4 = \$4.50. Considering the same costs as in subsection K.1, we obtain a CBR of \$4.50/\$4.18 = 1.08.
2. Model 2: this model deducts from the original benefits of four trips per day (\$4.50) the net savings of transport costs per trip per day (\$0.37). Therefore, the total benefits per trip are equal to \$4.19; giving us a CBR of 0.99.

K.3 Scenario 2

A second scenario considers the country's minimum wage for 2016, which is lower than the average labor income reported in the sample. In this case, ratios are around 1 on average.

1. CBR of model 1: $\$4.38/\$4.18 = 1.05$
    - Total benefits per trip (computed as the value of saving travel time per day and per trip): $(\$0.125 \times 70)/2 = \$4.38$
2. CBR of model 2: $\$4.00/\$4.00 = 0.96$
    - Total benefits per trip (computed as the value of saving travel time per day and per trip minus the net savings of transport costs per trip per day): $\$4.38 - \$0.37 = \$4.00$

K.4 Scenario 3

A third sensitivity analysis assumes travel time savings are 50% lower than the estimated values (35 minutes) and report CBRs between 1.08 and 0.99. In general, results are lower than the baseline scenario but do not vary widely across the scenarios.

1. CBR of model 1: $\$4.50/\$4.18 = 1.08$
    - Total benefits per trip: $(\$0.257 \times 35)/2 = \$4.50$
2. CBR of model 2: $\$4.12/\$4.18 = 0.99$
    - Total benefits per trip: $\$4.50 - \$0.37 = \$4.12$

K.5 Worst case scenario

For the worst-case scenario, we assume four trips per day plus the minimum wage and obtain results below 1. We argue that this is a highly unusual scenario given that 97% of survey respondents indicate they made two trips or fewer in the day prior to the interview.

1. CBR of model 1: $\$2.19/\$4.18 = 0.52$
    - Total benefits per trip: $(\$0.125 \times 70)/4 = \$2.19$

2. CBR of model 2: \$1.81/\$4.18 = 0.43
    - Total benefits per trip: \$2.19 − \$0.37 = 1.81

K.6 Most positive scenario

The most positive scenario calculates CBRs considering the travel time savings estimated for the populations with the largest gains in accessibility: El Alto. We also adjust the values of labor income for this population, considering that average incomes reported for El Alto households are lower than in La Paz. Basic information included in the current analysis:

- Average monthly salary in El Alto, obtained from the survey: \$2,477
    - Daily salary: \$0.26
- Independent monthly average net income in El Alto: \$1,922
    - Daily net income: \$0.20
- Average income: \$0.23
- Savings of travel times for the El Alto: 96 min

The results show that benefits in this case are more than 2.50 times the size of project costs:

1. CBR of model 1: \$11.00/\$4.18 = 2.63
    - Total benefits per trip: (\$0.23 × 96)/2 = \$11.00
2. CBR of model 2: 10.62/\$4.18 = 2.54
    - Total benefits per trip: \$11.00 − \$0.37 = 10.62

Overall, the results suggest that the economic benefits of MT outweigh the costs. Of course, the major caveat of this analysis is that the estimated benefits are LATEs affecting a specific segment of the population. All the results are included in Table 7.