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Commute mode choice behavior of academic population: a comparative study of five Italian universities

Simone Caiello[c], Riccardo Ceccato[e], Matteo Colleoni[c], Alessia De Falco[d], Ilaria Henke[d], Massimiliano Gastaldi[e], Daniele Giubergia[b], Nadia Giuffrida[a], Margherita Mascia[a], Italo Meloni[b], Michele Ottomanelli[a], Luigi Pariota[d], Anastasiya Ramusik[c], Riccardo Rossi[e], Eleonora Sottile[b]*

[a] *Polytechnic University of Bari, 70126 Bari, Via Edoardo Orabona 4, Italy*
[b] *University of Cagliari, 09124 Cagliari, Via San Giorgio 12, Italy*
[c] *University of Milano-Bicocca, 20126 Milano, Piazza dell'Ateneo Nuovo 1, Italy*
[d] *University of Naples Federico II, 80125 Napoli, Via Claudio 21, Italy*
[e] *University of Padua, 35122 Padova, Via VIII Febbraio 2, Italy*

Abstract

This study examines travel behaviors and modal choices among students, faculty, and staff across five Italian universities in Bari, Cagliari, Milan, Naples, and Padua. It analyzes factors influencing travel choices, such as travel times, costs, and access, while considering socioeconomic and professional differences. Using Multinomial Logit (MNL) models, the study compares the travel patterns of students and faculty/staff, highlighting how perceptions vary by context. Elasticity measures assess the potential impact of sustainable mobility policies. The large, diverse sample strengthens the generalizability of findings, aiding in the design of targeted interventions to influence academic travel behavior.

Keywords: academic mobility; travel behaviors; discrete choice models

1. Introduction and Relevant Background

Academic communities, including students, faculty, and administrative staff, play a crucial role in urban mobility due to the significant volume of trips generated by university campuses or decentralized campuses (Balsas, 2003; Rotaris & Danielis, 2014; Sottile et al., 2021). The increasing focus on sustainable mobility in academic institutions (Balsas, 2003; Hancock & Nuttman, 2014), combined with the non-standard travel pattern within this population

* Corresponding author. Tel.: +39 070-675-6403.
E-mail address: esottile@unica.it

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(Whalen et al., 2013), makes universities an ideal setting for evaluating policies aimed at promoting sustainable commuting (Delmelle & Delmelle, 2012; Sottile et al., 2021).

The literature on commuting behavior in academic settings and on the impact of Travel Demand Management (TDM) strategies to reduce car use and promote sustainable transport across academic population is now well established (e.g., Balsas, 2003; Shannon et al., 2006; Rotaris & Danielis, 2014, 2015). Most university TDM efforts focus on limiting car use through parking restrictions and transit subsidies (Shannon et al., 2006; Barata et al., 2011; Zhou, 2014; Aoun et al., 2013). Other measures include cycling infrastructure and behavioral tools like personalized travel plans. Effectiveness varies: parking pass ownership strongly predicts car use (Delmelle & Delmelle, 2012), while free bus services are effective but costly (Rotaris & Danielis, 2015). Combining subsidies and parking fees may help, but overall impacts are mixed (Logan et al., 2020).

A critical step in designing effective transportation policies and TDM strategies is to first identify the main factors that influence commute mode choice across different segments of the academic population. However, much of the existing research centers only on students (Delmelle & Delmelle, 2012; Zhou, 2014; Sottile et al., 2021), largely because they represent the majority of campus users and are seen as more likely to keep sustainable travel habits in their future life (Logan et al., 2020). Although student-focused studies are common, some research compares commuting behaviors across academic subgroups. Such studies show how students tend to favor sustainable transport and are more sensitive to travel time and cost interventions (Shannon et al., 2006; Akar et al., 2012; Logan et al., 2020). However, comprehensive analyses of all academic subgroups are still rare. These comparative studies are crucial for assessing targeted policies and understanding diverse socioeconomic responses, especially since faculty and staff have highly different family constraints and incomes. Furthermore, faculty and technical-administrative staff are also those with the greatest ability to pay, which can lead to less sustainable mobility choices. Despite this potential, most studies use only basic descriptive methods (Miralles-Guasch & Domene, 2010; Akar et al., 2012; Logan et al., 2020). Moreover, comparing different contexts is valuable for understanding how varying infrastructures, built environments, and policies affect commuting behavior. However, such comparisons are only meaningful when the populations being compared are similar. The academic community provides a strong basis for this type of analysis due to its relatively consistent population structure. Despite the potentially insightful outcomes, previous studies often rely on descriptive and qualitative analyses (Balsas, 2003; Nelson et al., 2023), which limit causal inference and the strength of policy recommendations.

This paper contributes to the literature on academic travel behavior by conducting a comparative study across five Italian universities: Milan, Naples, Padua, Cagliari and Bari. It aims to identify key factors influencing differences in commute mode choice between students and faculty/staff while accounting for contextual variations, such as differences in city size and public transportation availability. To achieve this, we analyze how perceptions of Level of Service attributes vary across these five groups. Using elasticity analysis, we examine how socioeconomic status (student vs. faculty/staff) and contextual factors (policies and built environment) influence the effectiveness of potential interventions aimed at reducing car usage by modifying travel times and costs. The five case studies present distinct urban and transport profiles, which strengthens the comparative analysis. Milan and Naples are significantly larger, with Milan offering the most extensive and multimodal public transport system. Padua, though smaller, is notable for its high density of cycling infrastructure and established bike culture. Cagliari and Bari, in contrast, are smaller cities that rely primarily on bus services, with fewer public transport alternatives and limited cycling infrastructure.

The paper is organized as follows: Sections 2 and 3 describe the data and the methodology; Section 4 presents the results of the estimated models; Section 5 analyzes the elasticities; and finally, Section 6 discusses the main findings and their implications.

2. Data collection and descriptive analysis

The data used in this study were collected as part of a revealed preference (RP) survey designed to analyze the travel habits of the academic population at five Italian universities: the Polytechnic University of Bari, the University of Cagliari, the University of Milano-Bicocca, the University of Napoli-Federico II, and the University of Padova. Data collection took place between December 2023 and March 2024 through a self-administered online survey, which was distributed via mailing lists and in-person dissemination in classrooms.

The questionnaire was divided into two main sections. The first section gathered information on participants' university roles, campus locations, and mobility behaviors, including their usual mode of commuting, frequency of attendance, and available travel alternatives. The second section collected socioeconomic and demographic data, such as gender, age, household composition (including household size and the presence of children), and home addresses, which were used to simulate trip distance, travel time, and travel costs. Additionally, this section included questions related to personal mobility characteristics, such as car ownership and public transport subscriptions.

A data cleaning process was conducted to remove incomplete or inconsistent responses, as well as non-georeferenced origins and destinations. Google API services were used to calculate transportation attributes for the chosen alternatives and simulate those of available but unchosen options. The final sample includes 13,043 valid observations from five cities: Bari (452), Cagliari (1,202), Milan (2,365), Naples (3,665), and Padova (5,359).

Approximately two-thirds of respondents are students, while one-third are faculty or staff. Naples has a higher proportion of students due to extensive in-class data collection, whereas Bari has a greater faculty/staff presence. Concerning the sample modal split, public transport use is significantly higher in Milan and Naples ($p < 0.001$ vs. Bari, Cagliari, and Padua). Bicycle commuting is most common in Padua ($p < 0.001$ vs. all others), while walking trips are most frequent in Bari ($p < 0.001$ vs. all others). Private car use is highest in Cagliari and Bari ($p < 0.001$ vs. Milan, Naples, and Padua). This modal split aligns with the transportation offer: Milan and Naples have the most developed public transit systems, contributing to high transit use, further supported in Naples by a free public transport policy for students; Cagliari and Bari have the least rail infrastructure but compact layouts that encourage walking; and Padua, with its extensive cycling network, has the highest share of bicycle commutes. Milan records the highest average commute distance at 30.7 km, significantly longer than in the other cities, where averages range from 21.2 km in Cagliari to 25.4 km in Bari ($p < 0.01$ vs. Bari; $p < 0.001$ vs. Cagliari, Naples, and Padua).

As frequently happens, commuting behavior is shaped less by choice than by constraints in available transport options. To account for this, the questionnaire asked participants whether they had (or perceived they had) access to specific modes. A notable share of respondents reported having only one viable commuting option. Among students, 44.2% (4,122 out of 9,325) were limited to a single mode, mostly public transport (61% of student transit users, with peaks in Bari at 75% and Naples at 69%) or walking (29% of student). This is largely due to limited access to private motorized vehicles or the impracticality of commuting by foot or bicycle. Faculty and staff were less affected, but 16.4% (608 out of 3,718) also reported only one available mode. In this group, half of public transport users and 17% of walkers had no alternative. These "captive" commuters were excluded from the model estimation, as they provide no information on mode choice behavior. Moreover, bicycle users in Naples, Cagliari, and Bari were also excluded due to their very low numbers, which prevented meaningful inclusion. As a result, the final sample used for model estimation consists of 5,185 students and 3,086 faculty and staff, distributed across the five study contexts as shown in Table 1.

Table 1 Commute mode choice by study context and academic subgroup in the model dataset.

		Bari		**Cagliari**		**Milan**		**Naples**		**Padua**	
	Mode choice	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Students	Private veh.	47	47.00	246	47.77	244	28.18	633	45.15	400	17.38
	PT	26	26.00	232	45.05	544	62.82	710	50.64	976	42.40
	Walking	27	27.00	37	7.18	38	4.39	59	4.21	234	10.17
	Bicycle					40	4.62			692	30.06
	Total	**100**	**100.00**	**515**	**47.80**	**866**	**100.00**	**1,402**	**100.00**	**2,302**	**100.00**
Faculty/ staff	Private veh.	164	74.89	280	74.87	246	45.22	332	75.80	586	38.78
	PT	17	7.76	47	12.57	213	39.15	73	16.67	207	13.70
	Walking	38	17.35	47	12.57	21	3.86	33	7.53	125	8.27
	Bicycle					64	11.76			593	39.25
	Total	**219**	**100.00**	**374**	**100.00**	**544**	**100.00**	**438**	**100.00**	**1,511**	**100.00**

3. Methodology

This article examines how students and faculty/staff perceive Level of Service attributes across four commute modes (car, public transit, walking, cycling) in five different contexts. We estimated separate Multinomial Logit (MNL) models for each academic group (students vs. faculty/staff), using context-specific dummies and interaction

terms with key variables like travel time and cost to capture heterogeneous preferences across city case-studies. Separate models by academic group allowed for clearer behavioral comparisons and addressed sample size disparities across contexts. Building five models (one per context) while controlling for academic role would have resulted in highly uneven sample sizes, complicating direct comparison. A single combined model would have required numerous interaction terms, making interpretation difficult. Our approach is supported by prior research on distinct mobility behaviors of students vs. faculty/staff (Shannon et al., 2006; Akar et al., 2012; Logan et al., 2020).

We also computed own and cross elasticities for each mode by increasing travel time and cost by 1% and observing changes in choice probabilities. These were calculated separately for each context and academic group, enabling comparison of sensitivity to travel attributes between students and faculty/staff across the five case studies. All models and calculations were performed using the Apollo package in R (Hess & Palma, 2019).

4. Models' results

Results from the estimation of the two models, one for each academic subgroup (students and faculty/staff), are shown in Table 2. We first note that the alternative-specific constants do not have a substantive interpretation, as they simply adjust the model to replicate the sample shares after accounting for the range of exogenous variables.

4.1. Context-specific and Level of Service variables

Among students, utility for public transportation (PT) tends to be lower outside Padua. In Bari and Naples, the baseline preference for PT over private car is reduced, possibly due to lower service efficiency (Bari) or the excessive crowding (Naples). In Cagliari, PT utility is initially the same as in Padua, but declines more steeply with increasing cost, likely reflecting the limited quality of bus-based systems without dedicated lanes. Milan students also show the same baseline PT utility as students in Padua but are less sensitive to in-vehicle PT travel time, likely due to the presence of high-quality metro and rail services. In terms of car use, Milan students are less deterred by increases in travel time and cost, which keeps car travel over PT use competitive even over longer distances compared to Padua. In Naples, although car cost has a stronger negative impact than in Padua, PT cost is perceived as even more burdensome. This may be due to the prevalence of subsidized or free PT, where even small price increases are strongly felt. As shown by Shampanier et al. (2007), even small increases from a zero price are felt more strongly, since free goods are perceived as having disproportionately high value. Across all contexts, students perceive out-of-vehicle PT time (e.g., walking and waiting) as more burdensome than in-vehicle time, while both being less burdensome than car travel time, possibly due to the stress or effort associated with driving among younger or less experienced individuals.

Active mobility patterns also vary across cities. Walking is less common in Naples and Cagliari, possibly due to more hilly morphology. Milanese students are less likely to cycle than those in Padua, despite showing lower disutility for longer cycling times. This could be related to the presence of a public collective transport service that is competitive with cycling due to its coverage and high stop density. In Padua, well-developed infrastructure and a compact urban layout encourage higher rates of active travel. Students in Padua consistently report lower disutility for cycling and walking, reinforcing the city's role as a supportive environment for sustainable modes.

Faculty and staff exhibit broadly similar patterns, though some differences emerge. In Bari and Cagliari, PT is less preferred than cars compared to Padua, while in Milan and Naples, baseline PT utility is higher compared to Padua's colleagues. However, this advantage diminishes with longer travel times, particularly in Naples where the disutility of out-of-vehicle PT time is especially high, possibly due to poor conditions at stops and stations. In Milan and Naples, faculty and staff also report higher disutility from in-vehicle PT time, likely due to discomfort or crowding associated with more population densities. PT cost sensitivity is greater among staff compared to car cost, reflecting the higher fare levels and the availability of free campus parking, which further reduces the perceived burden of car travel. Faculty and staff in Milan and Cagliari show a higher baseline utility for walking compared to other contexts (despite Cagliari's hilly morphology), suggesting a stronger general preference for walking in these cities. This may reflect heavier traffic conditions, making walking more appealing for short trips by helping avoid congestion. Cycling remains most common in Padua, where it is perceived similarly to car travel in terms of disutility, likely due to better infrastructure and safety. In Milan, although the baseline utility for cycling is high, disutility rises sharply with longer trips, indicating that concerns over safety or infrastructure may limit longer-distance cycling.

Table 2 Models' estimates.

			STUDENTS		FACULTY/STAFF	
			Value	**t-stat**	**Value**	**t-stat**
ALT. SPECIFIC CONSTANT	**ASC Car**		-8.846	-9.01	-5.896	-5.76
	ASC Walking		-0.588	-0.33	-3.557	-3.39
	ASC Bicycle		-2.246	-1.73	-0.870	-0.71
CONTEXT-SPECIFIC (Base: Padua)	**Public Transport**	Bari	-0.514	-1.82	-0.887	-2.55
		Cagliari	--	--	--	--
		Milan	--	--	1.963	6.23
		Naples	-1.063	-4.15	1.687	2.87
	Walking	Bari	--	--	--	--
		Cagliari	-0.698	-2.90	0.538	2.05
		Milan	--	--	1.323	3.18
		Naples	-2.875	-8.87	--	--
	Bicycle	Milan	-2.367	-5.05	1.529	3.23
LEVEL OF SERVICE CHARACTERI-STICS	**Car**	Travel Time	-0.126	-12.34	-0.069	-5.25
		Travel Cost	-0.496	-5.42	-0.408	-4.17
	Public Transport	In-Vehicle Travel Time	-0.059	-10.40	-0.020	-2.30
		Out-of-Vehicle Travel Time	-0.070	-14.03	-0.064	-7.37
		Travel Cost	-0.516	-11.52	-0.801	-3.92
	Walking	Travel Time	-0.128	-12.11	-0.117	-10.86
	Bicycle	Travel Time	-0.159	-12.68	-0.062	-5.21
INTERACTION TERMS	**Car**	Time * Milan	0.030	2.10	--	--
		Cost * Milan	0.255	2.62	--	--
		Cost * Naples	-0.158	-1.68	--	--
	Public Transport	In-Vehicle Travel Time *Cagliari	--	--	-0.014	-1.54
		In-Vehicle Travel Time * Milan	0.043	4.64	-0.029	-3.02
		In-Vehicle Travel Time * Naples	--	--	-0.061	-7.24
		Out-of-Vehicle Travel Time * Naples	--	--	-0.036	-1.56
		Cost * Naples	-0.681	-6.16	--	--
		Cost * Cagliari	-0.281	-2.86	--	--
	Bicycle	Travel Time * Milan	0.112	5.10	-0.040	-2.14
SOCIO-ECONOMIC ATTRIBUTES	**Car**	Driving freq. ≥ twice a week (base: < than twice)	1.259	10.12	0.885	7.35
	Public Transport	Age (log)	-2.540	-8.09	-1.557	-5.87
		At least one stop (base: no stop)	-0.609	-6.54	-0.809	-6.27
		Being off-campus (base: no)	-0.248	-2.00	--	--
		Single (Base: more than 2 HH members)	-0.917	-3.27	--	--
		At least a child (base: no children)	--	--	-0.479	-3.20
	Walking	Age (log)	-1.686	-3.05	--	--
		At least one stop (base: no stop)	-0.271	-1.86	--	--
		At least a child (base: no children)	--	--	-0.824	-4.47
		Subscripted to PT (base: no sub. to any PT service)	-1.356	-8.06	-0.923	-3.48
	Bicycle	Age (log)	-1.333	-3.26	-1.013	-3.76
		At least one stop (base: no stop)	--	--	-0.476	-3.28
		Subscripted to PT (base: no sub. to any PT service)	-2.280	-14.24	-2.046	-9.07
		Woman (base: Man)	-0.473	-3.65	--	--
GOODNESS-OF-FIT		Mean final log-likelihood		-0.437		-0.520
		Number of observations		5,185		3,086
		Adjusted Rho-squared		0.416		0.253

4.2. Socio-economic attributes

While no major socio-economic differences were found across contexts, several factors influence commuting behavior for both students and staff. Habitual car use for non-commuting trips increases the likelihood of driving to

university, reflecting routine behavior and attachment to cars (Gärling & Axhausen, 2003; Asgari & Jin, 2020; Macea et al., 2023). Car use also rises with age, linked to reduced PT use due to factors like youth-targeted discounts (e.g., Milan), higher income, and more complex travel needs (Dargay, 2001; Thorhauge et al., 2020). Trip complexity (e.g., stops along the way) favors driving over PT, which is less flexible (Haustein & Hunecke, 2007; Thorhauge et al., 2020). Off-campus students use PT less, possibly due to better car access or shorter commutes. Those living alone may avoid PT due to higher disposable income. Among staff, having children reduces walking and PT use, reflecting mobility constraints (Haustein & Hunecke, 2007). PT pass ownership predicts lower levels of active mobility, as pass holders may use transit even for short trips that others might make by walking or cycling. Lastly, male students are more likely to cycle than females, likely due to greater risk perception among women (Prati et al., 2019).

5. Elasticity effects

The results of the elasticity analysis (Table 3) confirm previous findings (Wardman et al., 2018; Guajardo Ortega and Link, 2025), showing that both travel cost and time are generally inelastic, with cost being more inelastic than time. This means individuals are more responsive to time changes than cost variations. For students, elasticities are generally higher than for faculty/staff (Litman, 2019), likely due to lower incomes and more flexible schedules. Students are especially sensitive to car costs, though their response to PT cost changes is weaker due to existing discounts. Their greater flexibility and fewer fixed obligations make them more responsive to changes in travel conditions. Car travel time elasticity is particularly high in Milan and Padua, suggesting these cities are more sensitive to travel policies, while other cities remain more car-dependent due to fewer alternatives. Notably, cross-elasticities show that higher car time and costs can lead to a shift towards PT, especially in Bari and Cagliari, where students may respond strongly to disincentives like parking restrictions. Cycling also shows potential in Milan, in line with the fact that Milanese students face longer commutes and perceive bike time as less burdensome. PT improvements have especially high potential in Bari and Cagliari, with Bari showing strong substitution away from car use. For faculty and staff, elasticities are lower overall, reflecting more structured routines and constraints such as parenting responsibilities. Still, car travel time elasticity is high in Milan and Padua, indicating room for policy impact. Cross elasticities between car and PT are strong, particularly due to widespread free campus parking. In Naples, PT interventions (especially reducing walking and waiting time) show high effectiveness. Faculty and staff also display higher own elasticity to PT costs, possibly due to higher fares, especially in Bari, Cagliari, and Padua.

Walking time shows the highest elasticities across both groups, consistent with McDonald (2008), indicating its high perceived burden, likely due to the physical effort walking requires.

6. Discussion and conclusions

This paper analyzes academic commuting behaviors across five Italian universities, highlighting how perceptions and modal choices vary not only by user role but also, and especially, by territorial differences and the available transport offer. Context- and role-specific data are particularly valuable to support the development of targeted policies to promote more sustainable academic mobility. Descriptive analysis reveals that a significant portion of the sample consists of mode “captives”, particularly those dependent on public transport and walking. While not captured in the mode choice model, this finding underscores the crucial importance of a reliable public transport system for users without viable alternatives. The effectiveness of possible transport measures acting on both travel time and travel cost varies significantly across cities, with each city’s unique characteristics influencing the most appropriate interventions. In Milan, reducing car-related costs (e.g., limiting free parking for faculty and staff) and promoting cycling infrastructure could encourage shifts toward more sustainable modes. In Naples, where public transport is heavily subsidized, improving comfort and reducing waiting times may be more effective, particularly for faculty and staff. In Bari and Cagliari, where public transport is less developed and car use prevails, enhancements like dedicated bus lanes, more frequent services, and reducing illegal parking could lower car dependency. Cagliari’s hilly topography presents added challenges for walking and cycling, emphasizing the need for efficient and accessible transit. In Padua, strong cycling infrastructure and a robust transit system already support sustainable travel, though further reduced parking availability for faculty-staff might help to increase PT uptakes and further boost bike usage among this category.

A key strength of this study is its large, diverse sample, enhancing the generalizability of findings. However, the model does not account for individual preferences or psycho-attitudinal factors, which significantly influence travel behavior. Moreover, while city-level variables highlight territorial differences, they may not fully explain how specific transport features affect choices. Future research will develop more advanced mode choice models incorporating individual-level heterogeneity and detailed attributes of the transport offer, such as infrastructure quality and service reliability at trip origins and destinations. A second-wave survey using stated preference (SP) data will also explore the potential of Mobility-as-a-Service (MaaS) packages to encourage more sustainable travel in academic contexts.

Table 3 Own and cross elasticity effects by study context and academic subgroup.

				STUDENTS				FACULTY/STAFF
Car Travel Time	**Car**	**PT**	**Walk**	**Bike**	**Car**	**PT**	**Walk**	**Bike**
Bari	-0.731	1.217	0.110		-0.155	1.024	0.174	
Cagliari	-0.763	0.837	0.112		-0.132	0.653	0.161	
Milan	-1.254	0.522	0.043	0.250	-0.566	0.602	0.034	0.148
Napoles	-0.669	0.579	0.156		-0.213	0.858	0.194	
Padua	-1.529	0.551	0.024	0.079	-0.486	0.833	0.084	0.171
Car Travel Cost	**Car**	**PT**	**Walk**	**Bike**	**Car**	**PT**	**Walk**	**Bike**
Bari	-0.217	0.389	0.007		-0.070	0.595	0.027	
Cagliari	-0.235	0.263	0.010		-0.056	0.316	0.035	
Milan	-0.563	0.234	0.033	0.121	-0.272	0.300	0.009	0.040
Napoles	-0.428	0.366	0.165		-0.100	0.425	0.048	
Padua	-0.428	0.160	0.004	0.017	-0.159	0.326	0.016	0.040
PT In-Vehicle Travel Time	**Car**	**PT**	**Walk**	**Bike**	**Car**	**PT**	**Walk**	**Bike**
Bari	0.423	-0.841	0.059		0.041	-0.405	0.008	
Cagliari	0.497	-0.605	0.239		0.081	-0.567	0.056	
Milan	0.244	-0.115	0.042	0.076	0.420	-0.549	0.102	0.170
Napoles	0.301	-0.277	0.099		0.175	-0.833	0.083	
Padua	0.663	-0.356	0.057	0.103	0.086	-0.294	0.008	0.016
PT Out-Of-Vehicle Travel Time	**Car**	**PT**	**Walk**	**Bike**	**Car**	**PT**	**Walk**	**Bike**
Bari	0.291	-0.642	0.103		0.080	-0.863	0.043	
Cagliari	0.318	-0.441	0.486		0.098	-0.784	0.158	
Milan	0.801	-0.415	0.365	0.493	0.471	-0.679	0.309	0.336
Napoles	0.408	-0.398	0.398		0.240	-1.257	0.338	
Padua	0.544	-0.358	0.122	0.153	0.190	-0.724	0.041	0.057
PT Travel Cost	**Car**	**PT**	**Walk**	**Bike**	**Car**	**PT**	**Walk**	**Bike**
Bari	0.158	-0.363	0.073		0.049	-0.544	0.033	
Cagliari	0.163	-0.209	0.150		0.044	-0.346	0.068	
Milan	0.405	-0.200	0.147	0.168	0.200	-0.274	0.125	0.100
Napoles	0.220	-0.223	0.321		0.055	-0.289	0.080	
Padua	0.360	-0.214	0.063	0.074	0.112	-0.444	0.030	0.039
Walking Travel Time	**Car**	**PT**	**Walk**	**Bike**	**Car**	**PT**	**Walk**	**Bike**
Bari	0.115	0.390	-0.596		0.207	0.402	-0.960	
Cagliari	0.037	0.263	-1.865		0.160	0.617	-1.563	
Milan	0.023	0.084	-1.580	0.233	0.020	0.095	-1.749	0.175
Napoles	0.033	0.087	-1.408		0.078	0.284	-1.293	
Padua	0.024	0.109	-1.603	0.368	0.059	0.100	-1.606	0.223
Bicycle Travel Time	**Car**	**PT**	**Walk**	**Bike**	**Car**	**PT**	**Walk**	**Bike**
Milan	0.026	0.024	0.031	-0.513	0.088	0.166	0.155	-0.948
Padua	0.169	0.236	0.437	-0.580	0.172	0.173	0.187	-0.270

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