

Institute for Climate Change and Sustainable Development

Annual Report 2020-2021

Introduction

The Institute for Climate Change and Sustainable Development was established in 2009. During 2020-2021 the Institute strengthened its research areas and continued with its research efforts to promote interdisciplinarity.

The Board of the Institute met regularly during this year where a number of key decision were taken with respect to the work of the Institute and the development of programmes, projects and events.

This report outlines the work and achievements of the Institute for Climate Change and Sustainable Development during the period October 2020 and September 2021.

THE BOARD OF THE INSTITUTE 2020-2021

Chairman **Prof. Simone Borg**Vice-Chair and Director **Prof. Maria Attard**

Members:

Prof. Richard Muscat

Mr Philip Sammut

Dr Philip Von Brockdorff

Dr John C. Betts

Prof. Alex Torpiano

Prof. Sandro Lanfranco

Prof. Adrian Muscat

Prof. John A. Schembri

Dr Thérèse Bajada

Dr Margaret Camilleri Fenech

Dr Anton Bartolo

Ms Karyn Scerri (student)

Aims of the Institute

- (a) to perform and promote interdisciplinary research on issues related to sustainable development, social sustainability, and climate change including mitigation and adaptation strategies;
- (b) to provide consultancy, advice and assistance on sustainable development and climate change including mitigation and adaptation strategies;
- (c) to provide continuous education, undergraduate, and postgraduate courses within the scope of the Institute subject to the Statutes and Regulations of the University;
- (d) to act as host institution for scholars, professors and chairs of international repute, as well as programmes, networks and fora, that aim to enhance the profile of the Institute within the regional and European research area, in areas related to sustainable development and climate change including mitigation and adaptation strategies;
- (e) to use telemetry, IT tools, intelligent systems, and modelling for monitoring, research, decision support and strategic planning;
- (f) to engage in knowledge transfer and awareness raising initiatives on sustainable development and climate change with companies, organisations and other institutions outside the University to promote best-practice (e.g. to promote the uptake of cleaner technologies; to mitigate and adapt to impacts of climate change on business operations and markets);
- (g) to network and liaise with similar or complementary, university institutions and centres for sustainable development or climate change; and
- (h) to disseminate acquired knowledge through online media, publications, seminars, conferences and teaching programmes.

The University of Malta Institute for Climate Change and Sustainable Development

The Administrative Office

During 2020-2021 the Institute was located in 45, Triq I-Esperanto, Msida and in Porta Cabins located in Car Park 6. The office housed the administrative as well as the academic staff, whilst the researchers, interns, students and project work was transferred to the Porta Cabins. The Director's Office was located in the Humanities. Although not ideal, work continued unabated throughout the years.

The Institute's Human Resources

Mr Carlos Cañas Sanz continued to work on a number of projects. He also continued his work on his PhD at the Institute and presented his work at a number of conferences and a number of meetings locally and abroad. Mr Cañas spent most of this term in Spain conducting an Erasmus+internship in Madrid.

Mr Stephen Joseph Giuliano worked as a Part-time Research Support Officer II to support the work of the H2020 CITIVAS DESTINATIONS Project and the Nudging Active Travel Project.

Mr Jurgen Ciantar was employed as a part-time research support officer to help with the institute data analytics requirements, whilst **Ms Karyn Scerri** was employed as part-time Research Support Officer II to support the Nudging Active Travel Project. She joined the Institute as a full-time MPhil student working on active travel and the concept of laziness in transport and mobility research.

Ms Suzanne Maas and Mr Mark Bugeja concluded their work as Research Support Officers in the H2020 CIVITAS DESTINATIONS Project. Both were enrolled as PhD students at UM. During this term however Ms Maas concluded her PhD studies and was engaged on a part-time basis to support the Nudging Active Travel Project. Mr Bugeja continues his PhD studies on part-time with the Faculty of ICT, supported by Prof. Maria Attard as co-supervisor.

Dr Thérèse Bajada, Lecturer continued servicing the Institute and several other departments within the University. She is also an Associate Member of the Institute for Sustainable Energy at the University. **Dr Margaret Camilleri Fenech**, Assistant Lecturer (TR4) has successfully defended her thesis and has been awarded her PhD. Both support the growth in the Institute's teaching, reearch and administration.

Mr Raphael Mizzi has continued to work on the Green Travel.

Ms Romina Zammit, the Institute Administration Specialist has continued to manage and support the Institute, its staff and activities.

Community Outreach

The Institute on the WWW

The Institute website has continued to act as a medium for communication with the University community and the general public. The Institute's website contains reference to almost all the work that the Institute engaged in since its opening in 2009. This is complemented by a Facebook page where news and other items are regularly uploaded. Social media efforts have now also extended to the UM Instagram page.

The Institute in the Media

Newsbook – 29 November 2021 Il-metro se jsolvi l-problem tat-traffiku f'Malta? Prof. Maria Attard https://newsbook.com.mt/il-metro-se-jsolvi-l-problema-tat-traffiku-fmalta/?fbclid=lwAR2HomCD9U6yZEcIOI2E3dwXIc3c1nWjIIfDpozxElmvYjM11zkn7bodtto

THINK Magazine – 9 November 2021 Timed Cities. The City Designed for its People. Interview with Bajada, T., Mifsud, W.J. and Scheiber, S. https://www.um.edu.mt/think/timed-cities-the-city-designed-for-its-people/

Newsbook – 18 October 2021 Metro f'20 sena jew trasport b'ħeffa f'xhur? Prof. Maria Attard https://newsbook.com.mt/metro-f20-sena-jew-trasport-bheffa-fxhur/?fbclid=lwAR0peOZQmuL7NX17nokQS06Fxjhho9Uccre0aik1DJdHEgg7nvuMmuFh0F0

Times of Malta – 11 September 2021 Editorial: Tackling the parking problem. Prof. Maria Attard https://timesofmalta.com/articles/view/tackling-the-parking-problem.899639?fbclid=lwAR2aWs1beniR7n46cM3OGAZ0rhxPU1zg1_yK46wQbY6dQCDekuPEYre103g

The Malta Independent – 22 August 2021 Malta could miss its 2030 targets unless effective action is taken, expert warns. Prof. Maria Attard

https://www.independent.com.mt/articles/2021-08-21/local-news/Malta-could-miss-its-2030-targets-unless-effective-action-is-taken-expert-warns-6736236119?fbclid=lwAR1LSU1mlaJcR6S-MCAn9WLLY0 3ISMT 7l54YXnfJoeXeXfYazMSBs 1hl#.YSU7DdGBHkl.facebook

Lovin Malta – 14 Mary 2021 WATCH: Driverless buses are coming to Malta and test runs could hit the roads next year. https://lovinmalta.com/lifestyle/travel/watch-driverless-buses-are-coming-to-malta-and-test-runs-could-hit-the-roads-next-year/

TVM – 14 May 2021 Jitnieda proģett ta' karozzi tal-linja mingħajr xufier – identifikati erba' rotot https://tvmnews.mt/news/jitnieda-progett-ta-karozzi-tal-linja-minghajr-xufier-identifikati-erba-rotot/

EUCAD 2021 WISE-ACT – 20 April 2021 The implications of Autonomous and Connected Transport, particularly in car dependent places such as Malta. Prof. Maria Attard https://eucad2021-conference.eu/page-1341

TVM – 4 February 2021 II-problema tal-parkeġġ f'Malta. Prof. Maria Attard https://www.facebook.com/popolin.mt/posts/216412120196517/

Businessnow.mt – 2 February 2021 Major potential for mass transit, but current proposals overshoot our potential and limitations. Prof. Maira Attard https://businessnow.mt/major-potential-for-mass-transit-but-current-proposals-overshoot-our-potential-and-our-limitations/

Times of Malta – 27 January 2021 Doughnut economic model and its application to Malta. Prof. Maria Attard Malta Sustainability Forum. https://timesofmalta.com/articles/view/doughnut-economic-model-and-its-application-to-malta.847551?fbclid=lwAR0gBjxoRCqMCaE7Kj-LUYnvT0wtNJ1FO--utTy10pWEJ uswZR0MpH7gDl#.YBGKqw36oq0.facebook

Times of Malta - 3 October 2020 Editorial: No walk in the park for pedestrians in Malta. Prof. Maria Attard https://timesofmalta.com/articles/view/outdoor-life-and-pedestrians.821641?fbclid=lwAR3sjaWHdQ2 MSKThH2xVTp4iRaxmvooLXqtFXMNS5wlxowzFr4lLRsvFo#.X3iLG l1bfg.facebook

TV and Radio Contributions

During the year Prof. Maria Attard, Dr Thérèse Bajada, Dr Margaret Camilleri-Fenech contributed to a number of television and radio programmes to raise awareness and discuss issues related to sustainable mobility, climate change and sustainability and waste management. Programmes included TVAM/Popolin (PBS), Radju Malta, Newsbook (RTK Radio), Għandi X'Ngħid, NET Television, Super One Television and Campus FM.

Participation in conferences, invited lectures and other events

CIVITAS Forum – DESTINATIONS Living Lab Events 12-13 October 2020 Prof. Maria Attard, Ms Suzanne Maas, Malta Evaluation team presented at this CIVITAS event to promote the DESTINATIONS project.

EURAXESS India Webinar – Conversations with an ERC Evaluator 24 November 2020 **Prof. Maria Attard** was invited to present at this webinar to guide potential ERC applicants in the process of application.

Prof. Maria Attard was awarded the Transport Research Chair 2020-2021 of the Benelux Interuniversity Association of Transport Researchers (BIVEC-GIBET) and presented three keynote lectures (available at https://www.bivec-gibet.eu/transport-chair-2020/)

Lecture 1: The politics of transport, health and environment Wednesday, December 16, 2020

Lecture 2: Car dependence and inequality: Malta as a not-so-unique case study Wednesday, February 24, 2021

Lecture 3: *Our cities - how space distribution fosters inequality in transport* Thursday, May 27, 2021

Invited keynote by **Prof. Maria Attard** on *Role of Intelligent Transportation Systems in Future Mobility* at the University of The West Indies Transportation Symposium 2021 "Towards A Sustainable, Efficient Transportation System", organised online (Trinidad and Tobago), 17-19 May, 2021.

Invited guest lecture by **Prof. Maria Attard** on *Active Travel for Wellbeing. Potential and Challenges* Transport Planning Lecture Series, Università Iuav di Venezia, organised online (Venice), 11 May, 2021.

Dr Thérèse Bajada participated in a podcast entitled "Sustainable Mobility and Transportation". Interviewed by Muñoz Abela, J.M., Bureau 105. Published 5 November, 2021 [https://bureau105.studio/sustainable-mobility-and-transportation]

Dr Thérèse Bajada, Dr Wendy Jo Mifsud, Dr Sarah Scheiber presented at the THINK Soapbox "Timed Cities" 29 October 2021

Dr Margaret Camilleri Fenech organised a webinar entitled *Breadcrumbs: History, nutrition, and waste* to commemorate the late Mr Anton Pizzuto who was the Director of the Cleaner Technology Centre. The webinar was organised in collaboration with the Mediterranean Food Platform.

List of Conference Presentations

Attard, M., Guzman, L.A., Oviedo, D. (2021) Urban Space Distribution: the case for a more equitable mobility system. Presented at the CODATU International Conference, Dakar, Senegal (online), 13-16 September.

Satariano, B., **Bajada, T.** (2021) The emergent inequities and inequalities resulting from the lockdown and social distancing measures taken to stop the spread of the COVID-19 pandemic within a Maltese scenario. Who, where and why? Presented at the Annual Interantional Multi-Disciplinary Conference at Junior College, Malta. 14 September.

Maas, S., Attard, M., Caruana, M.A. (2021) Motivators and barriers for shared bicycle use in 'starter' cycling cities: Evidence from BSS user surveys in three Southern European island cities. 24th Euro Working Group on Transportation (EWGT 2021) International Conference, Aveiro, Portugal (online), 08-10 September.

Maas, S., Attard, M., Dimitriou, L. (2021) Policies and practices to promote cycling in Southern European island cities: challenges and solutions from three 'starter' cycling cities. Proceedings of the XXV International Conference "Living and Walking Cities". Pedestrians, Urban Space and Health, Brescia, Italy 9-10 September.

Bajada, T., Satariano, B. (2021) Using Coworking spaces and the timed city concept as a policy package for sustainable mobility. The Case Study of Malta: experiences, perceptions and reality. Presented at the RGS-IBG Annual International Conference, London (online), 30 August - 3 September.

Maas, S., Attard, M., Dimitriou, L. (2021) The presence and impact of spatial boundaries in transport geography. Presented at the RGS-IBG Annual International Conference, London (online), 30 August - 3 September.

Pace, A., **Attard, M.** (2021) Urban transformations in a Mediterranean island-state: the case of Malta. Presented at the RGS-IBG Annual International Conference, London (online), 30 August - 3 September.

Scerri, K., Attard, M. (2021) Understanding the Impact of Pedestrianisation on Laziness and Car Dependency Reduction in European Islands. Presented at the RGS-IBG Annual International Conference, London (online), 30 August - 3 September.

Attard, M., Guzman, L.A., Oviedo, D. (2021) Analysing Urban Space Distribution for Sustainable Urban Mobility. Presented at the RGS-IBG Annual International Conference, London (online), 30 August - 3 September.

Attard, M. (2021) Land and sea boundaries. Opportunities and challenges for accessibility in Malta's Harbour Region. Presented at the RGS-IBG Annual International Conference, London (online), 30 August - 3 September.

Attard, M., Cañas, C., Maas, S., (2021) A participatory active travel workshop methodology to assess determinants for walking and cycling at university campus in Malta. 34th International Geographical Congress (IGC 2021), Istanbul, Turkey, 16-20 August.

Bajada, T., Satariano, B. (2021) 15-minute city and commuting. Presentation at the Summer School on Workplace Management Coworking Spaces COST Action 18214 (online) 08 July.

Camilleri, R., Attard, M. (2021) Practice Theory Based Visioning for Transport Backcasting studies. Paper presented at the Universities' Transport Study Group (UTSG) 53rd Annual Conference held in Loughborough (online), UK, 5-6 July.

Bajada, T. (2021) Discourses on transport and urban development A novel discourse analytical approach used to explore narratives associated with a bus reform. NECTAR Cluster 1 workshop *Discourses on Transport and Urban Development* (online) 15 June.

Cañas, C., Attard, M., Haklay, M. (2021) An innovative pedestrian-centred walkability assessment. Proceedings of the Transportation Research Board 100th Annual Conference, Washington D.C. (online), 24-29 January.

Camilleri, R., Attard, M., Hickman, R. (2021) Transitions to Sustainable Mobility from a Theory of Social Practice Perspective: Understanding Barriers to Modal Shift in Malta. Proceedings of the Transportation Research Board 100th Annual Conference, Washington D.C. (online), 24-29 January.

Maas, S., Nikolaou, P., Attard, M., Dimitriou, L. (2021) Factors influencing bicycle sharing system use: case studies of three southern european island cities. Proceedings of the Transportation Research Board 100th Annual Conference, Washington D.C. (online), 24-29 January.

Cañas, C., Attard, M., Haklay, M. (2020) Applying Citizen Science Principles to Assess Perceived Walkability in Malta. Satellite on Citizen Social Science & Complex Systems Science in Conference on Complex Systems CCS2020 (online), 7-11 December.

Attard, M., Cañas, C., Maas, S., (2020) Determinants for walking and cycling to a university campus: insights from a participatory Active Travel workshop in Malta. 23rd Euro Working Group on Transportation (EWGT 2020) International Conference, Paphos, Cyprus (online), 16-18 September.

The Institute Visiting Lecturer

Prof. Silvio Nocera, Università luav di Venezia - online lecture delivered on the 6th May 2021.

New Research Activity

The Institute has continued to work on the projects awarded in the previous years. It has also succeeded to submit and participate in project proposals, both locally and abroad. Table below shows the projects and the outcome of the funding applications for 2020-2021.

Funding Programme	Title of Project	Project Partners	Outcome and
			Value
HORIZON2020	CIVITAS DESTINATIONS	Prof. Maria Attard, ICCSD and 27 other partners	2016-2021
SINO-MALTA (MCST)	GREENTRANS-PORT	Prof. Maria Attard, Dr Tingsong Wang (Wuhan University)	NOT AWARDED
Environment and Resource Authority	Waste Characterisation Project	Dr Margaret Camilleri Fenech, Prof. Liberato Camilleri	AWARDED
ERASMUS+	HEIDI	Dr Wendy-Jo Mifsud, Prof. Maria Attard	AWARDED
Regional Committees (North, Central)	Nudging Active Travel Project	Prof. Maria Attard, Carlos Cañas, Suzanne Maas, Karyn Scerri, Stephen J. Giuliano, Raphael Mizzi	AWARDED
Building Consultative Committee (BICC)	Recycling Construction Waste	Dr Margaret Camilleri Fenech	AWARDED
COST	Mobility as a Service (Maas)	Prof. Maria Attard	NOT AWARDED
COST	Freight Transport	Prof. Maria Attard	NOT AWARDED
HORIZON 2020	GrETA (Citizen Science)	Prof. Maria Attard w/Univ. of Paris, UCL, Univ. Geneva	NOT AWARDED
HORIZON 2020	RESTORE (Electrification of Airports)	Prof. Maria Attard (project lead Dr Robert Camilleri, UM and others)	NOT AWARDED
HORIZON 2020	GREENSCOPE (Electrification of Ports)	Prof. Maria Attard, Dr Alexander Micallef	NOT AWARDED
HORIZON 2020	All Ireland Approach for a Circular Economy in Plastics and associated resources (AICEP)	Dr Margaret Camilleri Fenech	NOT AWARDED
HORIZON 2020	Poly. Cycle	Dr Margaret Camilleri Fenech	NOT AWARDED
Energy and Water Agency	RESPECT (Transport and Renewable Energy Sources)	Prof. Maria Attard, Dr Robert Camilleri	NOT AWARDED

Travelling Smart – The Green Travel Plan Committee at the University of Malta



Prof. Maria Attard continues to chair the Green Travel Plan (GTP) Committee which aims to implement the University GTP approved in 2012. Mr Raphael Mizzi, the GTP Coordinator administrates the GTP work as well as acts as secretary to the GTP Committee.

The GTP Committee for 2020 - 2021 was made up of:

Prof. Maria Attard (Chair)

Mr Raphael Mizzi (Secretary)

Perit Christopher Spiteri (Director Estate and Works)

Mr Clayton Xuereb (Precincts Officer)

Mr Matthew Xuereb (KSU President)

Ms Thérèse Bajada (Travel Plan Expert, ICCSD)

Ms Amanda Ciantar (Office of Human Resources)

Ms Nathalie Cauchi (UHM)

Ms Maronia Schembri (Precincts Office)

Prof. Luciano Mulé Stagno (UMASA)

During October 2020 – September 2021 a number of initiatives were undertaken by the GTP Committee and the GTP Coordinator in order to improve travel to the University.

The Website

In order to maintain communication lines open with the University community the GTP website is updated on a regular basis with useful information and links about green travel to and from University.

Further useful links and information is made available through this website and publicised from time to time internally within the University community.

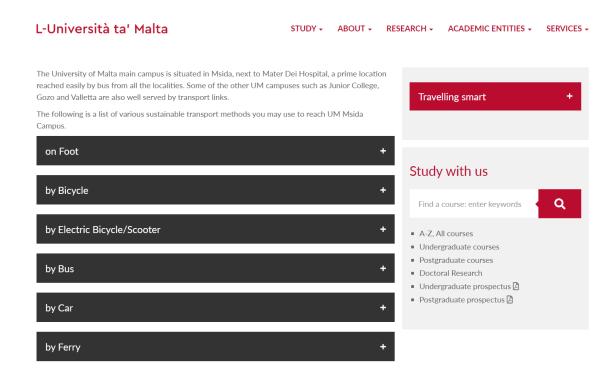
http://www.um.edu.mt/greentravel

Facebook

Since 2015 the ICCSD created a Facebook page where all the news and events related to the Institute are posted on this page. The GTP coordinator uploads several weekly news to create awareness about green travel with UoM members and other visitors.

Getting to UM Website

During summer 2020 the GTP coordinator has worked on the construction of a new website which gathers all the information related to sustainable mobility on Campus. This new website (um.edu.mt/gettingtoum) will provide the visitor with a list of sustainable transport methods that can be used to reach UM Msida Campus. The options are on Foot, by Bicycle, by Electric Bicycle/Scooter, by Bus, by Car and by Ferry. The website was launched in the first week of October 2020 together with a flyer which was disseminated both on social media platforms and printed versions at various points of the UM Msida Campus.





Inst. for Climate Change & Sustainable Development -

If you require any further information you may contact us on greentravel@um.edu.mt

(https://www.um.edu.mt/iccsd/travellingsmart/bfm)



Random rewards for active mobility

When we get to know that a new member of staff is using the bicycle for their first time we surprise them with some cycling accessories gifts related to safety, to keep their journey safe while commuting to/from UM.



Breakfast on the Move for Pedestrians

As part of the Active Travel Campaign, the GTP Coordinator teamed up with WalkingMalta to hand out useful information to UM students and staff who choose to walk to UM, together with a freebie and a healthy snack. The campaign was active on the 27-29th October 2020 and during these 3 days we talked to several students and staff learning about their walking experiences to help us understand what should be improved and promoted to make their walks safer, more comfortable and pleasant.



Installation of new showers and update of the UM Bicycle Facility Map

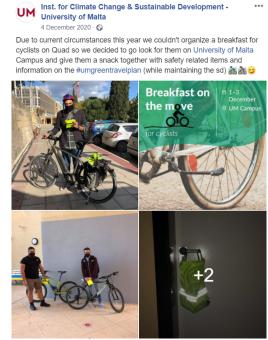
During the month of October 2020 more walking and cycling facilities have been installed at UM Msida Campus, with the addition of new showers at Gateway building and at Library Basement.

Following the installation of these new showers, the GTP Coordinator updated the UM Bicycle Facility Map which contains seven different layers; Bicycle Racks, Student Showers, Staff Showers, Water Dispensers, Entry/Exit Paths, Bicycle Services and Lockers.

The map which is constructed with Google Maps has a total view count of 17,707.

Breakfast on the Move for Cyclists

During the first week of December 2020 due to COVID-19 circumstances we couldn't organise a breakfast for cyclists on Quad, so we decided to go look for them on Campus and give them a snack, together with safety related items and information on the GTP.







Bicycle Shelters Slogans

During the month of August the GTP Coordinator together with the UM designers, sketched, designed, printed and installed different GTP related slogans on two main bicycle racks which are situated near Gateway building and

Green Travel Plan Committee Meetings

Due to COVID-19 measures this year's meetings were held on the 19th November 2020 and on the 22nd July 2021 via Zoom. The GTP Coordinator made sure to keep in touch with the members and follow the tasks listed in the previous meetings.

Participation in International Scientific Committees

Academic members of staff of the Institute have participated and contributed to a number of scientific committees and conferences during the period under review. Below is a list of contributions.

Prof. Maria Attard was a member of the International Scientific Committee of the CODATO XVIII Conference, Dakar, Seneegal, 9th – 11th November 2021.

Prof. Maria Attard is a member of the International Scientific Committee of the 2023 World Conference on Transport Research Society (WCTRS) Montreal, Canada (postponed from 2021 due to COVID-19)

Prof. Maria Attard was a member of the Scientific Committee of the International NECTAR Conference 2022 Toronto, Canada.

Together with Prof. Ilaria Mariotti and Dr Bernadine Satariano, **Dr Thérèse Bajada** organised two special online sessions sponsored by the Transport Geography Research Group at the 2021 RGS IBG Annual Conference. The two special sessions were entitled: *Coworking spaces:* a tool to reduce commuting and enhance well-being during the COVID-19 pandemic. September 2021

During the period under review **Prof. Maria Attard, Dr Thérèse Bajada** and **Dr Margaret Camilleri-Fenech** acted as paper reviewers to a number of academic journals including Case Studies in Transport Policy (Elsevier), Journal of Transport Geography (Elsevier), Transportation and Research Part A: Policy and Practice (Elsevier), Case Studies of Transport Policy (Elsevier), European Transport Research Review, Journal of Transport and Health (Elsevier), Journal of Environment Science and Management (Elsevier), Research in Transportation Business and Management (Elsevier).

During this term **Prof. Maria Attard** held positions of Editor of Research in Transportation Business and Management, Associate Editor of Case Studies in Transport Policy, and Editorial Board Member for Journal of Transport Geography; Communications in Transportation Research; Sustainable Transport and Livability. She is also a Co-Editor for the Emerald Transport and Sustainability Book Series.

Other staff news

Dr Thérèse Bajada have continued to support the MATSEC Boards for Geography and Environmental Studies.

Prof. Maria Attard co-edited four Journal Special Issues:

- Nocera, S., Attard, M. (2021) Active Travel and Mobility Management. Journal Special Issue in Research in Transportation Business and Management. Vol. 40.

- Le Pira, M., Attard, M., Ison, S. (2021) Urban Transport Planning and Policy in a changing world: bridging the gap between theory and practice. Journal Special Issue in Research in Transportation Business and Management. Vol. 39.
- Nocera, S., Attard, M. (2021) Active Travel Policies. Journal Special Issue in Research in Transportation Economics. Vol. 86
- Attard, M., Ison, S.G (2020) Urban Transport Policy and Planning. Journal Special Issue in Research in Transportation Business and Management. Vol. 36.

Prof. Maria Attard was Section Editor (Transport Policy and Planning) in the **Elsevier Encyclopedia of Transportation (2021)**

The Director of the Institute **Prof. Maria Attard** continued to serve as member of a number of International Committees during this year. These included:

- Member of the Internal SEA-EU (European University of the Sea) Quality and Ethics subcommittee at the University of Malta.
- Advisory Board Member, EU Funded Project EU-Citizen. Science. Led by the Museum of Natural History, Leibniz Institute for Evolutionary and Biodiversity Research, Berlin, Germany.
- Non-Visiting and Online PhD Examiner at the Universita della Calabria (Maria Grazia Bellizzi), Indian Institute of Science, Bangalore (Vajjarapu Harsha), University of Cyprus (Paraskevas Nikolaou).
- Chair of the ERC Starting Grant SH2 Panel (Brussels)

Karyn Scerri, Ph.D. student and researcher at the ICCSD was awarded the **WCTRS Y-II Innovation Grant** for her ongoing research in sustainable mobility under the supervision of Prof. Maria Attard. The WCTRS-YII is a collection of five grants for scholars conducting transport research, consisting of one Innovation Grant and four Prestige Grants, with abstract proposals being reviewed and selected by the Steering Committee of the Society. The awardees will present a paper as part of a Special Session at the 16th World Conference on Transport Research taking place July 2023 in Montreal, Canada.





Source: https://www.um.edu.mt/newspoint/news/2021/10/wctrsy-ii-innovation-grant-awarded-to-um-researcher and the state of the state o

Karyn Scerri was also awarded a scholarship by the Tertiary Education Scholarship Scheme (TESS) to further her Level 8 studies within the ICCSD.

Staff Publications for 2020-21

- Musselwhite, C.B.A., **Attard, M.** (2021) Public transport use in later life. In Mulley, C., Nelson, J. and Ison, S.G. (eds) The Routledge Handbook of Public Transport, Routledge. Chapter 28.
- **Cañas, C., Attard, M.** (2021) Policy and Planning for Walkability. Encyclopedia of Transportation. In: Vickerman, Roger (eds.) International Encyclopedia of Transportation vol 6. Pp. 340-348. United Kingdom: Elsevier Ltd.
- Pangbourne, K., **Attard, M**. (2021) Transitions and disruptive technologies in transport planning. In: Vickerman, Roger (eds.) International Encyclopedia of Transportation vol 6. pp. 309-313. United Kingdom: Elsevier Ltd.
- **Attard, M.** (2021) Introduction to Transport Policy and Planning. In: Vickerman, Roger (eds.) International Encyclopedia of Transportation vol 6. pp. 1-1. United Kingdom: Elsevier Ltd.
- Nocera, S., **Attard, M**. (2021) Active Travel and Mobility Management. Journal Special Issue in Research in Transportation Business and Management, 100663.
- Maas, S., Nikolaou, P., Attard, M., Dimitriou, L. (2021) Examining spatio-temporal trip patterns of bicycle sharing systems in Southern European island cities. Research in Transportation Economics 86, 100992.
- **Bajada, T., Attard, M**. (2021) A typological and spatial analysis of pedestrian fatalities and injuries in Malta. Research in Transportation Economics 86, 101023.
- Maas, S., Nikolaou, P., Attard, M., Dimitriou, L. (2021) Spatial and temporal analysis of shared bicycle use in Limassol, Cyprus. Journal of Transport Geography 93, 103049.
- Nocera, S., **Attard, M.** (2021) Editorial: Social and health implications of active travel policies. (Volume Editors). Research in Transportation Economics 86, 101071.
- Maas, S., Nikolaou, P., Attard, M., Dimitriou, L. (2021) Heat, hills and the high season: A model-based comparative analysis of spatio-temporal factors affecting shared bicycle use in three Southern European Islands. Sustainability, 13, 3274.
- **Attard, M., Cañas, C., Maas, S.,** (2021) Determinants for walking and cycling to a university campus: insights from a participatory Active Travel workshop in Malta. Transportation Research Procedia 52, 501-508.
- **Maas, S.,** Nikolaou, P., **Attard, M.**, Dimitriou, L. (2021) Classifying bicycle sharing system use in Southern European island cities: cycling for transport or leisure? Transportation Research Procedia 52, 565-572.
- Maas, S., Bugeja, M., Attard, M. (2021) Sustainable tourism mobility in Malta: Encouraging a shift in tourist travel behaviour through an innovative smartphone app for trip planning. In Zamparini, L. (ed) Sustainable Transport and Tourism Destinations. Emerald Publishing. Chapter 6.
- Di Marinio, M., **Bajada, T.** (2021). Book review: New Workplaces Location Patterns, Urban Effects and Development Trajectories. A Worldwide Investigation. Urban Studies, 303.
- **Camilleri-Fenech, M.,** Sola, J.O.I., Farreny, R., Durany, X.G. (2020) A snapshot of solid waste generation in the hospitality industry. The case of a five-star hotel on the island of Malta. Sustainable Production and Consumption, 21, 104-119.

STUDENT RESEARCH

Karyn Scerri B.A.(Hons) (Melit), M.Sc. (Melit.)

STREETS, STRESS AND SOCIETY: THE IMPACTS OF THE URBAN ENVIRONMENT AND TRANSPORT ON THE POPULATION'S MENTAL WELL-BEING

The development of sustainable urban environments is not solely based on the economic and environmental facets of sustainability but also includes social sustainability and resilience. This ensures that people within those urban areas are positively impacted by their environment and their well-being is safeguarded. This research focuses on understanding the link between the urban environment and the Maltese road users' mental well-being by using the town of Birkirkara as a case study area. Using questionnaire surveys and street observations, the main urban stressors experienced by Birkirkara residents was analysed. Apart from identifying the urban stressors from the literature and testing them in the case study area, their variation depending on the transport mode used will also be analysed. Additionally, maps showing the urban area and the street activity were created to support the study. The data from the questionnaires was then correlated with the features observed from the physical environment through a street quality checklist. The results show that although road users may evaluate their trips differently in terms of feelings of pleasantness, excitement and interestingness, ultimately, they experience the same stressors which are mediated through unsustainable aspects within the urban environment. The findings are useful inputs for policy-making and urban planning to move towards sustainable development of urban areas that positively impact the population's mental well-being.



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