

## Assoc. Prof. HEDİYE TÜYDEŞ YAMAN

### Personal Information

Office Phone: [+90 312 210 7471](tel:+903122107471)

Email: [htuydes@metu.edu.tr](mailto:htuydes@metu.edu.tr)

Web: <https://avesis.metu.edu.tr/htuydes>

### Education Information

Doctorate, Northwestern University, Civil Engineering, United States Of America 1999 - 2005

Post Graduate, Northwestern University, Civil Engineering, United States Of America 1997 - 1998

Post Graduate, Middle East Technical University, Faculty of Engineering, Department of Engineering Sciences, Turkey 1994 - 1997

Under Graduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1990 - 1994

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Network Traffic Management under Disaster Conditions., Northwestern University, Civil Engineering, 2005

Post Graduate, Airport Access Mode Choice Modeling, Northwestern University, Civil Engineering, 1998

Post Graduate, Boundary element formulation for dynamic analysis of a two-phase composite with applications to solid-solid interaction problems., Middle East Technical University, Faculty of Engineering, Department of Engineering Sciences, 1997

### Research Areas

Social Sciences and Humanities, Civil Engineering, Transportation Engineering, Airport Construction, Highways, Transportation Engineering, Railways Engineering (railroads, metro, etc.), Traffic Engineering, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2007 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2015 - 2016

Lecturer, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2005 - 2007

Research Assistant, Northwestern University, McCormick School Of Engineering, Civil Engineering, 2002 - 2004

Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 1994 - 1997

## Advising Theses

- TÜYDEŞ YAMAN H., Evaluation of approach leg capacities at a signalized urban roundabout, Post Graduate, E.CEM(Student), 2018
- TÜYDEŞ YAMAN H., CHARACTERISTICS OF CLOVERLEAF INTERCHANGE IN TURKEY, Post Graduate, E.GÖZDE(Student), 2018
- TUNCAY K., TÜYDEŞ YAMAN H., DETECTING QUEUE LENGTH ON URBAN ARTERIALS USING FLOATING CAR DATA (FCD), Doctorate, O.ALTINTAŞI(Student), 2018
- TÜYDEŞ YAMAN H., Evaluation of factors affecting mode choice of high-speed railway (HST) users in Turkey, Post Graduate, G.DALKIÇ(Student), 2017
- TÜYDEŞ YAMAN H., Modeling truck traffic in Turkey, Post Graduate, M.FAYYAZ(Student), 2015
- TÜYDEŞ YAMAN H., Determination of pedestrian level of service for walkways: METU campus example, Post Graduate, P.KARATAŞ(Student), 2015
- TÜYDEŞ YAMAN H., Road freight transportation on Turkish tollways, Post Graduate, A.MARDAN(Student), 2015
- TÜYDEŞ YAMAN H., Use of bluetooth technology for traffic analysis in urban road networks, Post Graduate, Ş.YÜCEL(Student), 2015
- TÜYDEŞ YAMAN H., Estimation of traffic impact at signalized intersections around the proposed health campus in Etilik, Ankara, Post Graduate, A.ASGHAR(Student), 2015
- BABALIK E., TÜYDEŞ YAMAN H., Assessment and simulation of car access control policies in city center: The case of Tunali Hilmi Street in Ankara, Post Graduate, M.DOĞAN(Student), 2014
- TÜYDEŞ YAMAN H., Identification of traffic accident hot spots and their characteristics in urban area by using GIS, Post Graduate, E.KUNDAKCI(Student), 2014
- BABALIK E., TÜYDEŞ YAMAN H., High speed rail development in Turkey: Government policy, investments and users perspective, Post Graduate, G.DALKIÇ(Student), 2014
- TÜYDEŞ YAMAN H., Estimation of road freight transportation emissions in Turkey, Doctorate, M.ÖZEN(Student), 2013
- TÜYDEŞ YAMAN H., Evaluation of pedestrian safety around bus stops using geographic information systems, Post Graduate, İ.YÜKSEKOL(Student), 2012
- TÜYDEŞ YAMAN H., Analysis of comprehension of traffic signs: A pilot study in Ankara, Turkey, Post Graduate, E.KIRMIZIOĞLU(Student), 2010
- TÜYDEŞ YAMAN H., An approach to investigate relationship between speed and safety on urban arterials, Post Graduate, Z.ARDIÇ(Student), 2008
- TÜYDEŞ YAMAN H., An integrated incident detection methodology with GPS-equipped vehicles, Post Graduate, S.DEMİROLUK(Student), 2007

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Evaluating the Relation Between Station Area Design Parameters and Transit Usage for Urban Rail Systems in Ankara, Turkey**  
Ozgur-Cevher O., Altintasi O., TÜYDEŞ YAMAN H.  
INTERNATIONAL JOURNAL OF CIVIL ENGINEERING, vol.18, pp.951-966, 2020 (Journal Indexed in SCI)
- **GIS-based evaluation of the speed limit increase on urban arterial traffic safety in Ankara**  
Kibar F. T. , TÜYDEŞ YAMAN H.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.13, 2020 (Journal Indexed in SCI)
- **Factors Affecting the Capacity Utilization of Road Freight Transport in Turkey**  
ÖZEN M., Fayyav M., TÜYDEŞ YAMAN H.  
TEKNIK DERGI, vol.31, pp.9813-9832, 2020 (Journal Indexed in SCI)
- **Quality of floating car data (FCD) as a surrogate measure for urban arterial speed**  
Altintasi O., Tüydeş Yaman H., Tuncay K.  
CANADIAN JOURNAL OF CIVIL ENGINEERING, vol.46, pp.1187-1198, 2019 (Journal Indexed in SCI)
- **Evaluation of the pricing preferences and value of time for high speed rail (HSR) users in Turkey**

Tüydeş Yaman H., Dalkıç G.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, pp.255-273, 2019 (Journal Indexed in SCI)

● **COMPETITIVENESS OF HSR IN TURKEY: CURRENT HSR CORRIDORS AND ESTIMATIONS FOR FUTURE ONES**

DALKIÇ G., TÜYDEŞ YAMAN H.

● INTERNATIONAL JOURNAL OF TRANSPORT ECONOMICS, vol.45, pp.659-693, 2018 (Journal Indexed in SSCI)

● **Variability in Sidewalk Pedestrian Level of Service Measures and Rating**

KARATAŞ SEVİNEN P., TÜYDEŞ YAMAN H.

● JOURNAL OF URBAN PLANNING AND DEVELOPMENT, vol.144, 2018 (Journal Indexed in SCI)

● **Developing performance measures to evaluate impact of cross-county collaboration for populations with access and functional needs**

ALİŞAN O., TÜYDEŞ YAMAN H., Kocatepe A., Ozguven E. E.

● INTERNATIONAL JOURNAL OF DISASTER RISK REDUCTION, vol.31, pp.873-885, 2018 (Journal Indexed in SCI)

● **Evaluation of Walkability and Pedestrian Level of Service**

TÜYDEŞ YAMAN H., Karatas P.

● INTELLIGENT TRANSPORTATION AND PLANNING: BREAKTHROUGHS IN RESEARCH AND PRACTICE, pp.264-291, 2018 (Journal Indexed in SCI)

● **An assessment of the CO2 emissions reduction in high speed rail lines: Two case studies from Turkey**

DALKIÇ G., BALABAN O., TUYDES-YAMAN H., CELIKKOL-KOCAK T.

● JOURNAL OF CLEANER PRODUCTION, vol.165, pp.746-761, 2017 (Journal Indexed in SCI)

● **Benefits of Managing the Capacity of Special Needs Shelters with Cross-County Collaboration Case Study in Florida**

ALİŞAN O., Kocatepe A., Tuydes-Yaman H., Ozguven E. E. , Ozel H.

● TRANSPORTATION RESEARCH RECORD, pp.131-143, 2017 (Journal Indexed in SCI)

● **Evaluation of Walkability and Pedestrian Level of Service**

TÜYDEŞ YAMAN H., Karatas P.

● ENGINEERING TOOLS AND SOLUTIONS FOR SUSTAINABLE TRANSPORTATION PLANNING, pp.30-57, 2017 (Journal Indexed in SCI)

● **BEST OPTION FOR REDUCING ON-CAMPUS PRIVATE CAR-BASED CO2 EMISSIONS: REDUCING VKT OR CONGESTION?**

ALTINTAŞI O., TÜYDEŞ YAMAN H.

● METU JOURNAL OF THE FACULTY OF ARCHITECTURE, vol.33, pp.87-105, 2016 (Journal Indexed in AHCI)

● **Better estimation of origin-destination matrix using automated intersection movement count data**

TÜYDEŞ YAMAN H., ALTINTAŞI O., Sendil N.

● CANADIAN JOURNAL OF CIVIL ENGINEERING, vol.42, pp.490-502, 2015 (Journal Indexed in SCI)

● **Modeling demand management strategies for evacuations**

TÜYDEŞ YAMAN H., Ziliaskopoulos A.

● ANNALS OF OPERATIONS RESEARCH, vol.217, pp.491-512, 2014 (Journal Indexed in SCI)

● **Evaluation of emission cost of inefficiency in road freight transportation in Turkey**

Ozen M., TÜYDEŞ YAMAN H.

● ENERGY POLICY, vol.62, pp.625-636, 2013 (Journal Indexed in SCI)

● **Comprehensibility of traffic signs among urban drivers in Turkey**

Kirmiziloglu E., TÜYDEŞ YAMAN H.

● ACCIDENT ANALYSIS AND PREVENTION, vol.45, pp.131-141, 2012 (Journal Indexed in SSCI)

● **Tabu-based heuristic approach for optimization of network evacuation contraflow**

Tuydes H., Ziliaskopoulos A.

● NETWORK MODELING 2006, pp.157-168, 2006 (Journal Indexed in SCI)

## Articles Published in Other Journals

- **Utilization of RFID data to evaluate characteristics of private car commuters in Middle East Technical University campus**  
ALTINTAŞI O., TÜYDEŞ YAMAN H.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.22, pp.171-177, 2016 (Journal Indexed in ESCI)

## Books & Book Chapters

- **Monitoring Urban Traffic from Floating Car Data (FCD): Using Speed or a Los-Based State Measure**  
ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.  
in: Directions of Development of Transport Networks and Traffic Engineering, Macioszek E., Sierpiński G., Editor, Springer, Cham, pp.163-173, 2019

## Refereed Congress / Symposium Publications in Proceedings

- **Traffic Event Related Blog Post Classification by Using Traffic Related Named Entities**  
Dundar Unsal A., Tuydes-Yaman H., KARAGÖZ P.  
2018 IEEE International Smart Cities Conference, ISC2 2018, Missouri, United States Of America, 16 - 19 September 2018
- **EVALUATING QUALITY AND PENETRATION RATE RELATION FOR COMMERCIALY AVAILABLE FLOATING CAR DATA (FCD)**  
ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.  
TRB 2019 Annual Meeting, Washington, Kiribati, 13 - 17 January 2019
- **From Smart Sustainable Cities to Smart Buildings: a Top to Bottom Approach**  
Parlak A. S. , Atasoy G., Öztürk H. I. , Akçamete Güngör A., Dikmen Toker İ., Tüýdeş Yaman H.  
5th international Project and Construction Management Conference (IPCMC2018), Girne, Cyprus (Kkct), 16 - 18 November 2018
- **Event Related Blog Post Classification by Using Traffic Related Named Entities**  
Ahmet Dündar Ü., Tüýdeş Yaman H., Karagöz P.  
Int. Smart Cities Conf (ISC2), Kentucky, United States Of America, 16 - 19 September 2018
- **Perception of parking pricing and willingness-to-pay (WTP): A preliminary evaluation among METU campus users**  
İPEKYÜZ B., GENEL V., ÖZTÜRK O. F. , ÖZ B., ÖZTÜRK H. I. , TÜYDEŞ YAMAN H.  
13th International Congress on Advances in Civil Engineering, 12 - 14 September 2018
- **Commute Modal Preferences of Middle East Technical University (METU) Students**  
DALKIÇ G., KARATAŞ SEVİNEN P., TÜYDEŞ YAMAN H.  
13th INTERNATIONAL CONGRESS ON ADVANCES IN CIVIL ENGINEERING, İzmir, Turkey, 12 - 14 September 2018
- **Perception of Parking Pricing and Willingness-to-Pay (WTP): A Preliminary Evaluation among METU Campus Users**  
İpekyuz B., Genel V., Öztürk O. F. , Öz B., Öztürk H. I. , Tüýdeş Yaman H.  
13th Advances in Civil Engineering Congress, İzmir, Turkey, 12 - 14 September 2018
- **Traffic Flow Characteristics of an Urban Arterial Based on Different Traffic Flow Models**  
ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.  
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018
- **A First Evaluation of the Relationship between High Speed Rail (HSR) and tourism sector in Turkey: The Cases of Two Turkish Cities**  
DALKIÇ G., TÜYDEŞ YAMAN H., DELAPLACE M.

International Congress on High Speed Rail: Technologies and Long Term Impacts, Ciudad-Real, Spain, 4 - 06 October 2017, pp.409-433

● **Barriers to Walking Among College Students**

TÜYDEŞ YAMAN H., ÖZ B., KARATAŞ SEVİNEN P., DALKIÇ G.

Transportation Research Board 97th Annual Meeting, 7 - 11 January 2018

● **A first evaluation of the relationship between High Speed Rail (HSR) and the tourism sector in Turkey: The cases of two Turkish cities**

DALKIÇ G., TÜYDEŞ YAMAN H., DELAPLACE M.

International Congress on High Speed Rail, Ciudad-Real, Spain, 4 - 06 October 2017

● **An assessment of the CO2 emissions reduction in high speed rail lines:Two case studies from Turkey**

DALKIÇ G., BALABAN O., TÜYDEŞ YAMAN H., Celikkol-Kocak T.

International Congress on High Speed Rail, Ciudad-Real, Spain, 4 - 06 October 2017

● **An Assessment of the CO2 emissions reduction in high speed rail lines: Two case studies from Turkey**

Dalgıç G., Balaban O., Tüydeş Yaman H., Çelikkol Koçak T.

International Congress On High Speed Rail Technologies and long term impacts, Madrid, Spain, 4 - 06 October 2017

● **High-Speed Rail (HSR) Users and Travel Characteristics in Turkey**

Celikkol-Kocak T., DALKIÇ G., TÜYDEŞ YAMAN H.

10th International Scientific Conference on Transportation Science and Technology (TRANSBALTICA), Vilnius, Lithuania, 4 - 05 May 2017, vol.187, pp.212-221

● **Evaluation of Walkability Among METU Students via Traditional Survey Versus Route-Based Data**

TÜYDEŞ YAMAN H., KARATAŞ SEVİNEN P., TAGMAT Z. P. , DALKIÇ G.

Transportation Research Board 96th Annual Meeting, Washington, Kiribati, 8 - 12 January 2017

● **Identification of Localities in Speed Patterns for Urban Arterials Using Floating Car Data FCD**

ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.

ACE 2016 12th International Congress on Advances in Civil Engineering, 21 - 23 September 2016

● **Detection of urban traffic patterns from Floating Car Data (FCD)**

ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.

19th European-Operational-Research-Societies Working Group on Transportation Meeting (EWGT), İstanbul, Turkey, 5 - 07 September 2016, vol.22, pp.382-391

● **Sürdürülebilir Ulaşım ve Kampüs Trafik Güvenliği: ODTÜ Öğrenci Bakışı**

KUNDAKCI E., KARATAŞ SEVİNEN P., DALKIÇ G., OZBİLEN B., TÜYDEŞ YAMAN H.

Sürdürülebilir Ulaşım İçin Yol Trafik Güvenliği Ulusal Kongresi, Ankara, Turkey, 7 - 08 December 2015, pp.244-256

● **Sürdürülebilir Ulaşım İçin Yerleşke İçinde Bisiklet Kullanımı: ODTÜ Kampüsü Örneği**

DALKIÇ G., OZBİLEN B., KARATAŞ SEVİNEN P., KUNDAKCI E., TÜYDEŞ YAMAN H.

İnşaat Mühendisleri Odası Kentsel Altyapı Sempozyumu, Trabzon, Turkey, 13 - 14 November 2015, pp.529-539

● **Commute behaviour of metu campus travelers**

Altintasi O., Tuydes-Yaman H.

18th International Conference of Hong Kong Society for Transportation Studies on Travel Behaviour and Society, HKSTS 2013, Hong Kong, hkg, 14 - 16 December 2013, pp.89-96

● **Traffic Management Challenges in Terrorist Attacks: Evacuations in Chemical/Hazardous Material Spills and Emergency Operations**

TÜYDEŞ YAMAN H.

Workshop on Transportation Security Against Terrorism Advanced Research, Ankara, Turkey, 5 - 06 May 2008, vol.54, pp.162-184

## Citations

Total Citations (WOS):157

h-index (WOS):6