

**Edna MRNJAVAC \*****Nataša SLAVIĆ \*\*****MOBILNOST GRAĐANA REPUBLIKE HRVATSKE: ISKUSTVA I STAVOVI,  
S OSVRTOM NA TURIZAM****MOBILITY OF CITIZENS OF CROATIA: EXPERIENCES AND ATTITUDES,  
WITH SPECIAL REFERENCE TO TOURISM**

**SAŽETAK:** Gradove i naselja Europe karakterizira koncentracija prometne potražnje koja ima za posljedicu zakrčenost, nisku razinu sigurnosti, zagađenje i devastaciju okoliša te visoke troškove. S time se susreću svi sudionici u prometu, a stupanj njihova zadovoljstva proporcionalan je trajanju i troškovima putovanja. Većina gradova i naselja istovremeno su turističke destinacije koje trebaju organizacijom i upravljanjem prometom omogućiti kvalitetu kretanja lokalnog stanovništva te posjetitelja. Primarni cilj ovog istraživanja je identificirati elemente mobilnosti i prometna rješenja sposobna rezultirati smanjenjem korištenja automobila u destinacijama, a koja su u nekim europskim gradovima verificirana i prihvaćena od strane korisnika. U nastojanju utvrđivanja mogućih pravaca djelovanja koji bi uz najmanje ulaganja i u najkraćem roku povećali mobilnost u gradovima i naseljima u Republici Hrvatskoj, pri istraživanju stavova i ponašanja sudionika u prometu u Republici Hrvatskoj korištena je metodologija Europske Komisije (TNS Opinion & Social, 2014).

**KLJUČNE RIJEČI:** upravljanje mobilnošću, prometne navike, mobilnost u turizmu, upravljanje mobilnošću u turističkim destinacijama, stavovi građana o mobilnosti

**SUMMARY:** The cities of Europe are characterised by a concentration of traffic demand, resulting in road congestion, low safety levels, environmental pollution and devastation, and high costs that afflict all traffic participants. The satisfaction of traffic participants is proportional to the duration and cost of travel. As most cities and towns are also tourism destinations, they need to organise and manage traffic to ensure good mobility for residents and visitors alike. The primary objective of this study is to identify the elements of mobility and to single out traffic solutions that are capable of bringing about the reduced use of automobiles in destinations and have been verified and accepted by consumers in some European cities. The methodology of the European Commission (TNS Opinion & Social, 2014) was applied in studying the opinions and behaviour of traffic participants in the Republic of Croatia to determine what action is needed to increase mobility in Croatia's cities with the least investment cost and in the shortest time possible.

**KEY WORDS:** mobility management, traffic behaviour, mobility in tourism, mobility management in tourism destinations, attitudes of citizens towards mobility

\* Professor Edna Mrnjavac, University of Rijeka, Faculty of Tourism and Hospitality Management, Croatia, e-mail: edna.mrnjavac@fthm.hr

\*\* Assistant Professor Nataša Slavić, University of Rijeka, Faculty of Tourism and Hospitality Management, Croatia, e-mail: natasa.slavic@fthm.hr

## 1. UVOD I KONTEKST ISTRAŽIVANJA

Prometni problemi u gradovima i naseљima poput zakrčenosti, velikog broja prometnih nezgoda, zagađenja okoliša i visokih troškova, doveli su do spoznaje da dosadašnje razvojne strategije temeljene na povećanju kapaciteta infrastrukture, ali i prometnih sredstava, nisu rezultirale željenom kvalitetom prometa s motrišta korisnika. Prometne strategije, koje stavljuju naglasak na maksimalno iskorištenje postojećih prometnih kapaciteta, često su ograničene zastarjelom prometnom infrastrukturom koja ne može zadovoljiti suvremene potrebe. U korak sa suvremenim razvojnim tendencijama društva kao cjeline raste uloga komunikacijskih i informacijskih tehnologija (ICT) koje postaju nezaobilazni čimbenik u prometu. Već je danas nemoguće primijeniti bilo kakvo „novo“ prometno rješenje bez uporabe ICT-a, no pravi će se razmjeri pokazati u budućnosti, prvenstveno u organizaciji i upravljanju prometnim tokovima.

To neće biti dovoljno pa se, u kontekstu spomenutih suprotnosti i ograničenja, otkriva nužnost za novim rješenjima koja će štedjeti prostor i čuvati okoliš, ali istovremeno zadovoljavati prometne potrebe. Recentna istraživanja ukazuju na zнатне mogućnosti koncepta upravljanja mobilnošću (*Mobility Management*), a brojni primjeri dobre prakse potvrđuju opravdanost takve orientacije prometnih politika. Ipak, treba imati na umu da su prilikom odabira i implementacije optimalnog koncepta od presudne važnosti navike i stavovi korisnika prometa.

### 1.1. Mobilnost: mogućnosti i ograničenja

Mobilnost u najširem smislu upućuje na čovjekovu potrebu za kretanjem motiviranu

## 1. INTRODUCTION AND RESEARCH CONTEXT

Traffic problems in cities, such as road congestion, numerous traffic accidents, environmental pollution and high costs, have led to the realisation that previous development strategies based on increasing the capacities of both infrastructure and transportation facilities have not resulted in the desired quality of traffic from the consumer perspective. Traffic strategies that make a point of utilising existing traffic capacities to the fullest extent possible are often constrained by outdated traffic infrastructure incapable of meeting modern needs. Keeping in step with the present-day development tendencies of society as a whole, the role of communication and information technology (ICT) is growing, as it becomes an indispensable factor in traffic. Even now, it is impossible to implement any “new” traffic solution that does not involve the use of ICT. The true extent of this will become even more obvious in the future, primarily in organising and managing traffic flows.

In the context of these contrasts and constraints, a need for novel solutions is identified, solutions that will save space and protect the environment while, at the same time, are capable of meeting traffic needs. Recent studies point out the considerable possibilities of the mobility management concept, and numerous best-practice examples justify such orientations of traffic policies. Nevertheless, it should be kept in mind that the habits and attitudes of traffic consumers are of crucial importance in the selection and implementation of an optimal concept.

### 1.1. Mobility: opportunities and constraints

In the broadest sense, mobility refers to the human need for movement that is moti-

različitim razlozima. Dosadašnji razvoj prometa i ograničenja rezultirala su potrebom da se mobilnošću upravlja, što je dovelo da razvita koncepta upravljanja mobilnošću. Cilj je povećati kvalitetu kretanja, povećati učinkovitost prometnih rješenja, smanjiti zagađenje i devastaciju okoliša, povećati sigurnost, poticati socijalnu jednakost, smanjiti troškove (Basaric *et al.*, 2015) te razvijati društveno prihvatljive oblike prometa. Koncept je orijentiran prema prometnoj potražnji i u osnovi se svodi na poticanje i stimuliranje ekoloških prometnih oblika.

U kombinaciji s planovima putovanja, kojima se obuhvaćaju velike homogene grupe i potiču na željeno ponašanje u prometu, razvijaju se modeli mobilnosti kao svojevrstan miks različitih strategija koje primarno obuhvaćaju tzv. „soft“ mjere, poput organizacije i koordinacije unutar postojećeg prometnog sustava, informiranja korisnika o različitim mogućnostima kretanja, promocije alternativa u kretanju, edukacije ili mjera povezanih s lokacijama koje generiraju velike prometne tokove (Litman, 2003). Ove neinvazivne mjere odnose se na učinkovitije korištenje postojećih prometnih kapaciteta s naglaskom na poticanje korisnika da mijenjaju svoje ustaljene navike. U srži koncepta upravljanja mobilnošću „soft“ mjere su često usmjerene k optimizaciji učinaka tzv. „hard“ mjera (na primjer, izgradnje infrastrukture) koje nisu dio upravljanja mobilnošću, ali su dio prometnog sustava kojim je potrebno upravljati na zadovoljstvo korisnika i svih dionika.

Vrlo pojednostavljeno, bitna poluga upravljanja mobilnošću je kontrolirano korištenje automobila u gradovima i naseljima na način da se poveća broj korisnika u vozilu ili vrijeme vožnje u istima, poticanje ekološki održivih (pješačenje, bicikl, vozila na električni pogon, tračnička vozila) te masovnih oblika prometa (javni gradski prijevoz - JGP). Pojedini autori poistovjećuju upravljanje mobilnošću s upravljanjem prometnom potražnjom (*Transport Demand Management*), odnosno s razvojem planova

vated by a variety of reasons. The prior development of traffic and constraints has resulted in the need to manage mobility, thus giving rise to the concept of mobility management. The aim is to improve the quality of movement, increase the effectiveness of traffic solutions, reduce environmental pollution and devastation, enhance safety, promote social equality, cut costs (Basaric *et al.*, 2015) and develop socially acceptable forms of traffic. The concept focuses on traffic demand and is essentially about promoting and encouraging environmentally-friendly forms of traffic.

In combination with travel plans that involve large homogeneous groups and encourage the desired behaviour in traffic, mobility models are being developed that are a kind of mix of different strategies, primarily including so-called soft measures, such as organising and coordinating existing traffic systems, providing information to traffic consumers about different ways of getting around, promoting alternative solutions and ensuring education, or measures tied to locations that generate large traffic flows (Litman, 2003). These non-invasive measures focus on facilitating the more efficient use of existing traffic capacities, with particular emphasis on encouraging users to change their usual habits. In mobility management, “soft” measures often serve to optimise the effects of “hard” measures (for example, infrastructure construction), which, while not being a part of mobility management, are nevertheless a part of the traffic system that needs to be managed to ensure the satisfaction of traffic users and other stakeholders.

Put simply, the key levers of mobility management are the controlled use of automobiles in cities and towns by increasing the number of users per vehicle or the time spent driving in vehicles, and the promotion of environmentally sustainable forms of traffic (walking, bicycles, electric vehicles, rolling stock) and mass forms of traffic (urban public transport – UPT). Some authors equate mobility management with transport demand management or with the development

putovanja (*Travel Plans*) dok drugi ne čine razliku između spomenutih pojmova. Budući da su razlike u nijansama, težište istraživačkog interesa treba usmjeriti prema temeljnomy stavu, a to je koncept usmjeren k upravljanju prometnom potražnjom.

Za sve spomenute pojmove je zajedničko da se u fokus postavlja čovjek i njegova potreba za kretanjem, a put za zadovoljenje tih potreba primarno čine različiti modeli učinkovitijeg korištenja postojećih prometnih kapaciteta. Istovremeno se razvijaju vrlo različiti koncepti mobilnosti: kvalitetan JGP uz svrshodno uređenje javnih gradskih prostora (Papagiannakis i Vitopoulou, 2015), poticanje efikasnijih obrazaca odvijanja prometa (Nechita *et al.*, 2016), *carsharing* i *carpooling* (dijeljenje prijevoza automobilom) (Grgurević *et al.*, 2016), dijeljenje vožnji taksijima (Martinez *et al.*, 2015). Toj skupini svakako treba pridodati različite modele korištenja bicikla, uključujući i sustave javnih bicikala u različitim varijantama (odnedavno uključuju i ponudu e-bike, čime se širi krug potencijalnih korisnika na skupine kojima je vožnja biciklom otežana zbog zdravstvenog stanja, dobi ili reljefne konfiguracije terena).

Uz fizičku mobilnost posebna se važnost pridaje *virtualnoj mobilnosti* (npr. rad od kuće, konferencijski pozivi, kupovanje putem Interneta, i mnogi drugi). Najnoviji tehničko-tehnološki dosezi u prvi plan ističu varijante autonomnih vozila - vozila poput autobusa i automobila s daljinskim upravljanjem koja bi iz temelja promijenila izgled gradskih ulica te otvorila novi prostor za pješake, bicikle, druženje i slično (Malasek, 2016).

Upravljanje mobilnošću je koncept u razvoju kojega kontinuirano obogaćuju nove ideje i koji je zbirni pojam za serije manje oplijljivih mjera povezanih s prometom (Enoch, 2012:32), kojima se nastoji mijenjati navike korisnika (Rahier *et al.*, 2015; Rocci, 2015), što je vrlo ambiciozan cilj, posebice imajući na umu ulogu koji osobni automobil

of travel plans, while others see no differences between these concepts. Because the differences are slight, the focus of research should address the fundamental view that it is a concept that focuses on managing transportation demand.

What all the mentioned concepts have in common is that they centre on people and their needs for movement, and the way to satisfy those needs is primarily through a variety of models using existing traffic capacities more efficiently. Mobility concepts that differ widely are being developed concurrently: quality UPT with appropriately designed urban public spaces (Papagiannakis and Vitopoulou, 2015), the development of more-efficient traffic patterns (Nechita *et al.*, 2016), car sharing and carpooling (Grgurević *et al.*, 2016), and urban shared taxi services (Martinez *et al.*, 2015). Various models of bicycle usage, including a variety of public bicycle systems (and since recently, the e-bike offer can also be added to the latter group, which broadens the circle of potential users to include people who have problems riding a bike due to health reasons, age or biking terrain).

In addition to physical mobility, special importance is attached to virtual mobility (for example, working from home, conferences calls, Internet shopping and many other forms). The latest technical and technological achievements highlight variations of autonomous vehicles, such as remote controlled buses and cars that would radically alter the appearances of city streets and open up new spaces for pedestrians, bicycles, socialising, etc. (Malasek, 2016).

Mobility management is a concept in progress, continuously being enriched with new ideas. It is a collective term for a series of less-tangible (softer) measures linked to traffic (Enoch, 2012: 32) that aim to change consumer habits (Rahier *et al.*, 2015; Rocci, 2015), which is a very ambitious goal, especially when considering the role that the passenger car plays in the ways people

ima u organizaciji života i zadovoljenu potrebu za kretanjem.

Upravljanje mobilnošću iziskuje koordinirano djelovanje znanosti, javnih i privatnih dionika te civilnog društva (Freudendal-Pedersen *et al.*, 2017). Inicijalne aktivnosti u okupljanju svih zainteresiranih i artikuliranju zajedničkih ciljeva i interesa su u domeni gradske uprave odnosno tijela lokalne uprave kao nositelja gradskih politika – uključujući i prometnu. Optimalni model mobilnosti za grad ili naselje može oblikovati tim stručnjaka i znanstvenika, multidisciplinarnog i interdisciplinarnog sastava, stoga je logičan slijedeći korak – formiranje tijela za razvoj i implementaciju. Slijedom zakonom definiranih obveza i odgovornosti jedino je lokalna uprava pozvana donositi strategijske odluke o razvoju grada, odnosno naselja, pa će u tom duhu odlučivati i o hijerarhiji različitih dionika u donošenju odluka i korisnika (Longo *et al.*, 2015) te birati model ICT-a koji će na optimalan način povezati dionike i korisnike te pružiti informacije za učinkovito upravljanje i razvijanje koncepta u budućnosti.

## 1.2. Upravljanje mobilnošću u turističkoj destinaciji

Turističke destinacije suočavaju se s dilemom kako i na koji način upravljati prometnim tokovima. Prometni problemi posebno dolaze do izražaja tijekom turističke sezone, a proporcionalni su izraženoj sezonalnosti turističke potražnje. Prometni tokovi u destinaciji nisu homogeni te se, pod uvjetom da je tranzitni promet konceptualno riješen izvan grada ili naselja, upravljanje mobilnošću fokusira na tokove domicilnog stanovništva i turističke tokove unutar destinacije.

Turističke destinacije se oslanjaju na više ili manje funkcionalne prometne sustave, koji su rezultat više ili manje tradicionalnog pristupa planiranju u kojima dominira

organise their lives and satisfy their movement needs.

Mobility management calls for the coordinated action of the sciences, public and private stakeholders, and civil society (Freudendal-Pedersen *et al.*, 2017). The initial activities involved in bringing together all interested parties and articulating common goals and interests are the domain of city councils and local government bodies, the makers of city policies, including traffic policies. Since a multidisciplinary and interdisciplinary team of experts and scientists is needed to design the optimal mobility model for a city or town, the next reasonable step is to form a model development and implementation body. Based on the duties and responsibilities prescribed by law, only the local authorities are qualified to make strategic decisions concerning the development of cities and towns. Accordingly, local authorities can also decide on the hierarchy of different stakeholders and users in decision-making (Longo *et al.*, 2015) as well as select the best ICT model to link stakeholders and consumers, and provide information to ensure the concept's future effective management and development.

## 1.2. Mobility management in a tourism destination

Tourism destinations are in a quandary about how and in what ways to manage traffic flows. Traffic issues are especially pronounced during the tourist season and are proportional to the degree of seasonality of tourism demand. Traffic flows in a destination are not homogeneous and, provided that transit traffic has been conceptually resolved to by-pass cities and towns, mobility management can focus on the flows of residents and tourists within the destination.

Tourism destinations rely on more or less functional traffic system that are dominated by automobile traffic and are the result of more or less conventional approaches to

automobilski promet (Kovačić, 2014:85). Turističke destinacije u Hrvatskoj su tipičan primjer takvog stanja.

Koncept mobilnosti nudi alternativu stalnom povećanju ponude prometnih sustava kao odgovoru na rastuću potražnju i suprotstavlja se gradnji i širenju prometnih kapaciteta nastojeći utjecati na prometnu potražnju, prvenstveno neinvazivnim mjerama po okoliš – nudeći rješenja koja počivaju na informiranju sudionika u prometu, promociji alternativnih oblika kretanja (biciklizma i pješačenja) te, prije svega, organizaciji i koordinaciji postojećih prometnih resursa (Kovačić, 2014:85).

Za razliku od lokalnog stanovništva čije je obrasce kretanja lakše predvidjeti i istražiti, pa pojedine grupe obuhvatiti i planovima kretanja, turistički tokovi su manje predvidivi. Obrasci putovanja domicilnog stanovništva gotovo su identični tijekom čitave godine s obzirom na jačinu, oscilacije i smjerove kretanja. Obrasci turističkog kretanja ovise o spomenutim značajkama, ali je za svaki segment moguće definirati rute, dobrim dijelom obujam i oscilacije tijekom sezone. Nužno je definiranje njihove strukture s obzirom na duljinu boravka (jednodnevni – višednevni) te s obzirom na ulogu prometa (funkcionalno kretanje – promet integriran kao atrakcija u proizvod destinacije). U prednosti su one turističke destinacije u čijem se prstenu nalaze turistička naselja, resorti, hotelski kompleksi, kampovi, tj. mjesta koja predstavljaju izvorišta tokova dok su odredišta tokova ljudi (turista) atrakcije na užem području destinacije.

Za hrvatske destinacije olakotnu okolnost predstavlja izvor prometno-turističke potražnje, a to su države Europske unije, od kojih mnoge već primjenjuju različite koncepte mobilnosti, ili su tradicionalno orientirane prema biciklizmu i sličnim prometnim načinima, ili su njihove energetske politike temeljene na održivim izvorima energije toliko zaživjele da su održivi oblici prometa integralni dio organizacije društva. Moguće

planning (Kovačić, 2014:85). Tourism destinations in Croatia are a typical example of this.

The mobility concept provides an alternative to constantly increasing the offer of traffic systems in response to growing demand. It opposes the construction and expansion of traffic capacities and seeks to influence traffic demand foremost through environmentally non-invasive measures. The solutions the concept offers are based on providing information to participants in traffic, promoting alternative forms of movement (cycling and walking) and organising and coordinating the existing traffic resources (*ibid*).

Unlike movement patterns of residents that are easier to predict, study and include in traffic plans, tourist flows are less predictable. The travel patterns of residents are almost identical all year round with regard to intensity, oscillations and directions of movement. The movement patterns of tourists have the same features and for each segment it is possible to define routes and, to a considerable extent, volumes and oscillations during the tourist season. The structure of each segment also needs to be established with regard to length of stay (single day or multiple days) and to the role of traffic (functional movement – traffic integrated as an attraction in the destination's product). Tourism destinations in which tourist complexes, resorts, hotel complexes and campsites, i.e. the starting points of flows, are located in the ring area are at an advantage, while the endpoints of the flows of people (tourists) are located within the inner area of the destination.

An extenuating circumstance for Croatian destinations is the source of traffic and tourism demand, that is, the EU countries, many of which have already implemented various mobility concepts or are traditionally focused on bicycling or similar modes of traffic, or whose power-supply policies, based on sustainable energy sources, have taken such a hold that sustainable forms of traffic have become an integral part of their societies. This

je zaključiti da, uz pravovremenu i kvalitetnu informiranost, turisti ne bi trebali imati potreškoća u prihvaćanju i uključivanju u koncepte mobilnosti tijekom odmora.

U hrvatskim uvjetima izazov su tokovi lokalnog stanovništva koji mogu prihvatiti neki od modela mobilnosti jedino pod uvjetom jasno definiranih i komuniciranih koristi (niža cijena, veća frekvencija, povoljan utjecaj na zdravlje, otvaranje novih pješačkih ili rekreacijskih zona te namjenskih prostora za pojedine dobne skupine). S obzirom na „ovisnost“ o automobilu, posebno je potrebno naglasiti da administrativno ograničavanje korištenja automobila na europskom tlu nije dalo rezultata pa to nije realno očekivati ni u Hrvatskoj. Stoga, od velike je važnosti pomno pripremiti poseban konzistentan skup mjera. Uz ograničenje upotrebe automobila s jedne strane, takve mjere s druge strane trebaju stimulirati ostale, prvenstveno ekološke oblike prometa u svim situacijama kad korištenje automobila nije nužno, uz jasno istaknute prednosti takvog odabira. Kojim će se mjerama stimulirati ostali oblici prometa ili upotreba automobila (nekim od načina dijeljenog ili ograničenog korištenja) ovisi primarno o navikama i životnom standardu stanovnika.

Koncept mobilnosti ne iziskuje nužno velika novčana ulaganja. Od presudne je važnosti dobra i kvalitetna informiranost korisnika u destinaciji, a u prilog tome svakako ide općeprisutan trend o zdravom načinu života i fizičkoj aktivnosti te općeprisutna svijet o potrebi očuvanja okoliša – i tijekom turističkih putovanja (UNWTO, 2017). Ponuda hrvatskih turističkih destinacija temelji se na stariim jezgrama u kojima nisu mogući veći građevinski zahvati (uključujući i prometnu infrastrukturu) dok su gotovo idealne za alternativne oblike prometa. Otvoreno je pitanje, međutim, u kojoj bi mjeri domicilno stanovništvo bilo spremno prihvatiti alternativu dosad poznatim načinima mobilnosti te bi li bilo opravdano razvijati koncept koji bi se primjenjivao samo tijekom turističke sezone.

suggests that, given timely and good-quality information, tourists should have little trouble embracing and participating in the mobility concept while on vacation.

In Croatia, the challenge is the flow of residents who could accept a mobility model only provided that the benefits are clearly defined and communicated (low price, higher frequency of services, favourable impact on health, opening new pedestrian or recreational areas, and special-purpose spaces for specific age groups). Given the ‘addiction’ to automobiles, it should be emphasised that administrative restrictions to curb automobile use in European countries have not yielded results and Croatia cannot be an exception. This makes it all the more important to carefully prepare a special, consistent set of measures. Alongside the restrictions in automobile use, these measures should encourage other, primarily environmentally-friendly forms of traffic in all situations where the use of automobiles is not essential, and should clearly articulate the advantages of such a choice. What measures will be used to encourage other forms of traffic or automobile use (through some form of sharing or limited usage) will depend largely on the residents’ habits and standard of living.

The mobility concept does not necessarily require large monetary investments. It is of exceptional importance to provide quality information to consumers in a destination. The ubiquitous healthy lifestyle and physical activity trend speaks in favour of this, as does the pervasive awareness of the need for environmental conservation even on tourist trips (UNWTO, 2017). The offers of Croatian tourism destinations are based on old town cores in which larger-scale construction projects are not possible (including traffic-infrastructure projects) but which are almost ideal for alternative forms of traffic. The question remains, however, as to what extent the residents would be willing to accept such alternatives to the established modes of mobility and whether it would be

Djelomičan odgovor na identificirana pitanja očekuje se od istraživanja stavova o mobilnosti u Hrvatskoj i Europskoj Uniji, posebice u onom dijelu koji se odnosi na navike i spremnost za mijenjanjem istih u kontekstu pogodnosti koje bi ponudili drugi modaliteti prometa.

## **2. STAVOVI GRAĐANA O MOBILNOSTI: REPUBLIKA HRVATSKA U ODНОСУ НА ЕУ**

Istraživanje koje je provela Europska komisija 2014. godine (TNS Opinion & Social, 2014) obuhvatilo je sve države uključujući i Hrvatsku. Identična metodologija (anketni upitnik i način obrade rezultata) korištena je za ovo istraživanje kojim su obuhvaćeni ispitanici u Republici Hrvatskoj 2016. godine. Ova dva nezavisna i potpuno odvojena istraživanja rezultirala su zanimljivim podacima o mobilnosti u Hrvatskoj, posebice u odnosu na turizam. Jednako tako, moguće je uočiti sličnosti i razlike u prometnim navikama stanovnika Hrvatske s protekom dvogodišnjeg razdoblja.

Implementirani upitnik sačinjava osam cjelina te ukupno 16 pitanja. Upitnik preuzet iz spomenutog izvještaja Europske komisije *Special Eurobarometer 422a „Quality of transport“* (TNS Opinion & Social, 2014) preveden je na hrvatski jezik, s obzirom da je ciljana populacija (uzorak) stanovništvo Hrvatske. Ispitivanje je realizirano od travnja do lipnja 2016. godine, a podaci su obrađeni u srpnju iste godine.

Uzorak je prigodni i namjerni. Ispitivanje su provodili studenti Fakulteta za menadžment u turizmu i ugostiteljstvu u Opatiji u okviru izvršavanja obveza na temeljnom kolegiju *Promet u turizmu*. Studenti su za provođenje ispitivanja educirani u trajanju dva školska sata prilikom čega je naglasak stavljen na adekvatni pristup ispitanicima,

justifiable to develop a concept that would be implemented only during the tourist season.

A partial answer to these questions is expected from the study on the attitudes towards mobility in Croatia and the European Union, particularly from the section on the habits and the willingness to change them in light of the advantages offered by other modes of traffic.

## **2. ATTITUDES OF CITIZENS TOWARDS MOBILITY: CROATIA VS. THE EU**

The 2014 study conducted by the European Commission (TNS Opinion & Social, 2014) encompassed all EU countries, including Croatia. An identical methodology (questionnaire and result-processing method) was used in the 2016 survey of respondents in Croatia. These two independent and completely separate studies have yielded interesting data on mobility in Croatia, particularly with regard to tourism. Similarities and differences in the traffic habits of Croatia's inhabitants across the two-year period have also been noted.

The questionnaire implemented consists of eight sections and a total of 16 questions. Taken over from the report of the European Commission *Special Eurobarometer 422a “Quality of transport”* (TNS Opinion & Social, 2014), the questionnaire was translated into the Croatian language as the target population (sample) was Croatian population. The survey was performed from April to June 2016, and the data were processed in July of the same year.

A convenience and purposive sample was used. The survey was conducted by the students of the Faculty of Tourism and Hospitality Management of Opatija, as part of the requirements for the course *Traffic in Tourism*. Prior to carrying out the survey, the students were trained during two school periods on the adequate way of approaching re-

ispravnost ispunjavanja upitnika i objašnjene su potencijalne nedoumice o sadržaju upitnika.

Pristup uzorkovanju ne odstupa značajno od onog koje je na zahtjev Europske Komisije proveo konzorcij TNS Opinion & Social u 2014. godini, no zbog objektivnih mogućnosti ispitanika, nešto je pojednostavljen. Ipak, fokus je stavljen na istu populaciju građana (rezidenti stariji od 15 godina). Ispitanici su instruirani o važnosti raznolikog uzorka po pitanju dobi, radnog statusa i pripadnosti geografskom području. Ovim istraživanjem obuhvaćeno je mišljenje 839 ispitanika (N=839, što je broj pravilno i potpuno popunjениh upitnika), što se može smatrati reprezentativnim uzorkom, pri čemu se posebno vodilo računa o zastupljenosti svih dobnih skupina, svih administrativnih regija Republike Hrvatske te uključivanja i zaposlenih i nezaposlenih osoba, odnosno studenata. Također, intervjuji s ispitanicima provođeni su licem u lice na hrvatskom jeziku. Sve navedeno u skladu je s osnovnim pristupom referentnog istraživanja kojim je u 2014. obuhvaćeno 1084 ispitanika iz Republike Hrvatske u ciljnoj populacijskoj skupini.

## 2.1. Rezultati istraživanja: odrednice svakodnevne mobilnosti

U svakodnevnim aktivnostima najviše se koristi osobni automobil. Projekat za Europsku Uniju je 54% (TNS Opinion & Social, 2014:7), dok je istraživanje u Republici Hrvatskoj 2016. pokazalo da gotovo polovica (48%) ispitanika koristi osobni automobil, oko 27% JGP i oko 19% pješači. Bez obzira na dominantnu ulogu automobila, udio JGP i pješačenja, a to su oblici prometa na koje se uz bicikl oslanja koncept mobilnosti, je znatan i predstavlja dobar temelj za razvoj u budućnosti. Međutim, to podrazumijeva podizanje razine kvalitete servisa JGP, odnosno osiguranje uvjeta za pješačenje i bi-

spondents and filling out the questionnaires correctly. Any ambiguities regarding the questionnaire contents were clarified.

While the approach to sampling did not differ substantially from that applied by TNS Opinion & Social in 2014 at the request of the European Commission, it was simplified to an extent considering the objective skills of the interviewers. Both surveys focus on the same population of citizens (residents above the age of 15). The interviewers were instructed on the importance of obtaining a diverse sample with regard to the respondents' age, employment status and geographical region to which they belong. This study includes the opinions of 839 respondents (N=839, the number of properly and completely filled questionnaires), which can be considered a representative sample. Special attention was paid to ensure the representation of all age groups, Croatia's administrative regions, and of the employed and unemployed persons and students. Face-to-face interviews were conducted with the respondents in Croatian language. The above stated is in line with the basic approach of the reference study, which included 1,084 respondents in the target population group from the Republic of Croatia in 2014.

## 2.1. Research results: determinants of daily mobility

The passenger car is used the most for daily activities. The EU average is 54% (TNS Opinion & Social, 2014:7), while the 2016 survey in Croatia shows that almost half (48%) of the respondents use passenger cars, about 27% use urban public transport (UPT) and 19% are pedestrians. Notwithstanding the dominant role of automobiles, the percentage of UPT users and pedestrians, i.e. the forms of traffic that the mobility concept involves along with bicycles, is considerable and represents a sound platform for future development. Such development, however, implies raising the quality of UPT services

ciklistički promet tamo gdje za to postoje i ostali uvjeti.

Neovisno o odabranom prometnom sredstvu, hrvatski ispitanici najvažnijim smatraju koliko im je neki oblik prometa praktičan i jednostavan za svakodnevno korištenje, a uz to im je važna i brzina. *Kriteriji za odabir prometnog sredstva u Republici Hrvatskoj* jesu pogodnost (46%) i brzina (41%). Dostupnost nekog oblika prometa i nedostatak alternative važni su za 27% odnosno 29% ispitanika, a cijena za samo 17% ispitanika. Imajući to na umu, mogućnost da ostali, prethodno spomenuti oblici prometa, supstutuiraju barem dio automobilskoga prometa postaje mnogo zahtjevniji zadatak. Za razliku od rezultata u Republici Hrvatskoj, u Europskoj Uniji kriterij „nepostojanje alternative“ je gotovo zanemariv, iz čega proizlazi da korisnicima stoje na raspolaganju barem dva različita prometna modaliteta za stizanje do željene lokacije. Hrvatski prometni sustav još uvek na mnogim relacijama nudi samo jednu mogućnost. Korisnici zapravo nemaju mogućnost izbora, a nositelji prometne aktivnosti, bez konkurenčije, nisu motivirani unaprjeđivati kvalitetu usluge. Ispitanici u Europskoj Uniji također najbitnijom značajkom prometa smatraju pogodnost (61%), njih 31% brzinu, a svega 16% dostupnost prometa (TNS Opinion & Social, 2014:14).

U Hrvatskoj 2016. godine većina ispitanika bila bi spremna *dati prednost JGP-u pod uvjetom jeftinijih ili sezonskih karata* (58%) i frekventnijeg servisa (46%), u odnosu na 2014. godinu kada je za ispitanike iz Hrvatske jednako važna cijena usluge kao i prostorna pokrivenost (36% odnosno 35%), nakon čega slijedi frekventnost (26%) (TNS Opinion & Social, 2014:22). Štoviše, iskazivanjem spremnosti na korištenje JGP-a pod određenim uvjetima, ispitanici su rangirali elemente kvalitete usluge JGP-a koji prometnim poduzećima (nositeljima JGP-a) trebaju poslužiti kao razvojne smjernice. U osnovi je to kombinacija veće frekvencije usluga i niže cijene. Ispitanici u EU-u navode i prostornu

and ensuring proper conditions for pedestrian and bicycle traffic wherever possible.

Regardless of the chosen mode of transport, Croatian respondents reported that the convenience and easiness of daily use of the transport mode was of the greatest importance to them, while speed was also important. The *criteria for selecting a mode of transport* in Croatia are convenience (46%) and speed (41%). The availability of a mode of transport and the lack of alternative modes are important for 27% and 29% of respondents, respectively. Price is important to only 17% of respondents. Having this in mind, substituting at least a part of automobile traffic with one of the other modes of transport mentioned above becomes a much more challenging task. Unlike in Croatia, the criterion “there is no alternative” is practically negligible in the EU, which implies that at least two different modes of transport are available to users to reach their destination. In many places in Croatia, the transport system still offers only one single mode of transport. Users have no alternatives to choose from and the transport providers, lacking competition, are not motivated to improve the quality of their services. The EU respondents also highlighted convenience (61%) and speed (31%) as the most important features of transport, while the availability of transport was important to only 16% (TNS Opinion & Social, 2014:14).

In the 2016 survey in Croatia, most of the respondents said they *would be willing to give preference to public transport* providing cheaper or seasonal tickets were available (58%) or the service was more frequent (46%), while in 2014 the price of the service and better public transport coverage were equally important to respondents from Croatia (36% and 35%, respectively), followed by service frequency (26%) (TNS Opinion & Social, 2014:22). By expressing their willingness to use UPT under specific conditions, the respondents ranked the elements of UPT service quality that should serve as

pokrivenost (možda dijelom zbog relativno velikog udjela gradova s velikim brojem stanovnika). U Hrvatskoj 2014. i 2016. godine jednako je važna bolja dostupnost javnog prijevoza u smislu raspoloživosti usluge u obliku u kojem je potrebna i na mjestima na kojima je potrebna. Usprkos sve većem broju mobilnih aplikacija o pojedinim elementima prometa, njihova uloga u Republici Hrvatskoj je zaista neusporedivo manja nego u većini država Europske Unije. Spremnost velikog broja ispitanika u Republici Hrvatskoj da koriste JGP djeluje ohrabrujuće i potvrđuje zaključak vezan uz prethodno istaknuti rezultat istraživanja.

Ovi rezultati su vrlo znakoviti jer ukazuju na drugačiju poziciju prometa na području Europske Unije i Republike Hrvatske - prometna potražnja u EU je vrlo razvijena i uzima u obzir različite kriterije prilikom odabira prometnog modaliteta, dok su u Hrvatskoj za korištenje JGP-a primarni kriteriji cijena i frekvencija, što u uvjetima kada nema mogućnost odabira između barem dva modaliteta, ne ostavlja prostor za razvoj drugih kriterija, a posljedično i kvalitetnijeg prometnog servisa.

Izdvojeno, vozači automobila i motocikla, po otprilike 25%, bi bili spremni u većoj mjeri koristiti JGP kad bi bio frekventniji, uz veću gustoću linija te uz jeftinije ili sezonske karte (TNS Opinion & Social, 2014:19). Ovakav stav potvrđuje načelni stav svih ispitanika i pokazuje smjer u kojem bi trebalo djelovati. Vozačima automobila i motocikala važne su frekvencija usluga, gustoća linijske mreže, cijena karata i usklađenost lokacija stajališta i parkirališta radi prelaska s jednog prometnog modaliteta na drugi. Znakovit je njihov pozitivan stav o uvođenju sezonskih karata, odnosno karata koje obuhvaćaju i povoljnije cijene različitim prometnim oblicima i turističkih sadržaja, jer u tome vide način za jednostavniji, frekventniji i jeftiniji promet, posebice uz mogućnost korištenja različitih mobilnih aplikacija.

development guidelines for UPT providers. Essentially, those conditions are a combination of higher frequency of services and lower prices. EU respondents also stated spatial coverage (maybe in part due to the relatively large share of cities with a large number of inhabitants). Better UPT accessibility – in terms of the availability of service in the forms needed and in the places needed – was equally important in both 2014 and 2016 in Croatia. Despite the growing number of mobile applications for various types of transport, the role they play in Croatia is indeed much, much less than that in most of the EU states. The willingness of a large number of respondents in Croatia to use UPT is encouraging and confirms the conclusion tied to the research results mentioned above.

These results are very telling as they underscore the different positions of transport in the EU and in Croatia. Transport demand in the EU is highly developed and takes into consideration a variety of criteria in choosing a mode of transport, while in Croatia the primary criteria in giving preference to UPT are price and service frequency. In conditions where there is no opportunity to choose between at least two modes of transport, not much room is left for developing other criteria or, consequently, better-quality transport service.

About 25% car and motorcycle drivers would be willing to use UPT services to a greater extent respectively, given higher service frequency, greater service coverage and cheaper or seasonal tickets (TNS Opinion & Social, 2014:19). This confirms the principle attitudes of all respondents and suggests what action should be taken. The frequency of services, the extent of service coverage, the price of tickets and the locations between stops and stations to enable easy transfer from one mode of transport to another are important to car and motorcycle drivers. Also significant is their positive attitude to introducing season tickets and tickets that include more favourable prices of different modes of transport and tourism services and

Različiti načini korištenja informacijskih i komunikacijskih tehnologija imaju određeni značaj jer pridonose kvaliteti prometne usluge. Nastavno na ulogu ICT-a u prometu, istražena je uloga *online povezanosti vozila* jer se na taj način može povećati sigurnost i protočnost prometa. Za razliku od 51% ispitanika u Europskoj Uniji (TNS Opinion & Social, 2014:5), u Hrvatskoj bi 2014. godine 46% vozača pristalo na online povezanost vozila, od čega u oba slučaja većinom uvjetno ili anonimno (TNS Opinion & Social, 2014:57). Ispitivanje iz 2016. godine pokazuje povećanje udjela hrvatskih ispitanika spremnih na povezivanje vozila online (ukupno 79%), iako i dalje većinom samo kada vozač tako odluči.

Zbog dinamičnih promjena, kako prometnih sredstava tako i ostalih elemenata sustava, *poslovi u prometu* oduvijek su smatrani zahtjevnim i složenim. Jedan od problema prometnog sektora je i zapošljavanje kompetentnog osoblja, s obzirom da posebice zaposlenici koji neposredno upravljaju prometnim sredstvima i nekim elementima prometnog procesa trebaju raspolagati posebnim znanjima, vještinama i psihofizičkim karakteristikama. Istraživanje je pokazalo da europski prometni sektor ima prostora za povećanje atraktivnosti radnih mesta i to posebice u segmentu povećanja plaća i poboljšanja uvjeta rada. Takvo mišljenje ima otprilike polovica ispitanika iz Republike Hrvatske, a nešto manje ispitanika iz Europske Unije.

Općenito uspoređujući poziciju Hrvatske u odnosu na ostale države, istraživanje provedeno na razini EU 2014. godine Hrvatsku uglavnom svrstava uz države poput Bugarske, Irske, Cipra i Grčke, rjeđe uz Sloveniju, Portugal, Litvu i Letoniju, još rjeđe uz Španjolsku, Rumunjsku, Maltu i Slovačku. Zanimljiv je rezultat kojim se Hrvatska našla u istoj kategoriji s prometno i gospodarski visoko razvijenom Švedskom po pitanju percepcije značajnog smanjenja

facilities, because they see this as a way of ensuring simpler and cheaper transport of greater frequency, particularly when coupled with the use of various mobile applications.

The different ways in which information and communication technologies can be used are important because they contribute towards the quality of transport services. Regarding the role of ICT in transport, the role of *online vehicle connectivity* was examined for its ability to enhance traffic safety and fluidity. Fifty-one percent of EU respondents (TNS Opinion & Social, 2014:5) and 46% of respondents in Croatia in 2014 would agree to have their vehicle connected online and, mostly in both cases, if it were conditional or anonymous. The 2016 study shows an increase in the share of Croatian respondents who would be willing to connect their vehicles online (79% in total) but, again, mostly only when they decide to do so.

Because of the dynamic changes to modes of transport and other elements of the system, *jobs in transport sector* have always been seen as demanding and complex. One of the problems of the transport sector is recruiting competent staff, especially considering that employees directly in charge of driving vehicles or managing other elements of the transport process need to possess special knowledge, skills and psycho-physical characteristics. The study showed that there is room in the European transport sector to enhance the attractiveness of jobs, in particular by providing higher wages and better working conditions. This opinion is shared by about half of the respondents in Croatia and somewhat less than a half of the EU respondents.

Generally comparing the position of Croatia relative to other countries, the 2014 survey conducted at the EU level shows Croatia mostly grouped with Bulgaria, Ireland, Cyprus and Greece; rarely with Slovenia, Portugal, Lithuania and Latvia; and even more rarely with Spain, Romania, Malta and Slovakia. An interesting result, referring to perceived considerable deterioration in the

kvalitetu usluge željezničkog prometa u promatranom razdoblju (TNS Opinion & Social, 2014:72).

quality of rail transport services in the observed period, placed Croatia in the same category as Sweden, a highly developed country in economic and traffic terms (TNS Opinion & Social, 2014:72).

## **2.2. Prometne navike građana RH: mobilnost u kontekstu turistički motiviranih putovanja**

U ovom dijelu rada fokus je na dijelu upitnika kojim se istraživao stav ispitanika o putovanjima na udaljenost veću od 300 kilometara u prethodnoj godini. Taj je dio rezultata izdvojen zbog važnosti, budući da su u tim putovanjima sadržana i ona s turističkim motivima.

U usporedbi s građanima Europe (2014.), hrvatski građani u sve većoj mjeri putuju na udaljenosti većoj od 300 kilometara. U 2016. godini približno je jedan od četiri hrvatska ispitanika realizirao samo jedno *putovanje od 300 i više kilometara unutar EU-a u posljednjih 12 mjeseci*. Gotovo dvije trećine ispitanika (65%) poduzelo je više od jednog takvog putovanja, a udio ispitanika koji nisu poduzeli putovanje duže od 300 kilometara u posljednjih 12 mjeseci je znatno niži nego 2014. godine – u odnosu na prosjek EU-a od 41% i udio takvih ispitanika u Hrvatskoj (44%, TNS Opinion & Social, 2014:T7) – manji je od 9%.

Za takva *duga putovanja, najviše za stupljeni oblici prijevoza* među hrvatskim su ispitanicima automobil (64%) i autobus (40%). Jedini drugi oblik prijevoza s udjelom većim od 10% je zrakoplov. Ovakva struktura odabira prometnih sredstava uklapa se u sliku o dominantnoj ulozi cestovnog prometa u svakodnevnim aktivnostima, kvalitetnu mrežu autocesta u Hrvatskoj, relativno nizak životni standard, ali i karakteristike ponude drugih prometnih modaliteta.

*Redoslijed prometnih sredstava* (u RH: automobil ili kamper, autobus, zrakoplov te vlak; u EU: automobil, zrakoplov, vlak i au-

## **2.2. Traffic habits of Croatian citizens: mobility in context of tourism-motivated travel**

This section of the paper focuses on the part of the questionnaire referring to the attitudes of respondents regarding travels longer than 300 km made in the previous year. These results have been singled out as important because they also include tourism-motivated travel.

When compared with their EU counterparts (2014), *the extent to which Croatian citizens are making trips of 300 km or more* is increasingly growing. In 2016, about one out of four Croatian respondents made at least one journey of 300 km or more within the EU in the last 12 months. More than half of the respondents (65%) made more than one such journey in 2016, and the share of respondents who did not is considerably lower (less than 9%) than in 2014 (44%, TNS Opinion & Social, 2014:T7; the EU average was 41%).

The *modes of transport most frequently used* by Croatian respondents *on long journeys* are cars (62%) and coaches (40%). The only other mode of transport with a share larger than 10% is airplanes. This structure of modes of transport reflects the dominant role of road traffic in everyday activities, the good-quality network of motorways in Croatia, the relatively low standard of living and the characteristics of the offers of alternative modes of transport.

The *ranking of modes of transport* (in Croatia: cars or camper-vans, coaches, airplanes and trains; in the EU: cars, airplanes, trains and coaches) confirms that a substantial part of journeys longer than 300 km have

tobus) potvrđuje da dobar dio putovanja dužih od 300 km ima turističke motive. Razlike u udjelima pokazuju da je europsko tržište mnogo razvijenije u smislu različitosti korištenih prometnih sredstava, što upućuje na to da je cijena manje bitna, dok je za stanovnike Hrvatske presudna. Veći raspon različitih oblika prometa uvijek znači veću ponudu različitih putovanja kojima se aktivira šire tržište.

Specifičnost je europskog kontinenta, u globalnim razmjerima, uloga željeznice u putničkom prometu. Stanovnici EU-a u određenoj mjeri (15%) koriste željeznički promet (koji je u Hrvatskoj zastavljen s minimalnih 3,7% 2016. godine), što je posljedica vrlo kvalitetne usluge, guste mreže željezničkih pruga i platežne moći u razvijenijim zemljama EU-a. Željeznički promet ima povjesne korijene, ali to ne bi značilo puno da se desecima godina željeznički promet intenzivno ne potiče i ne modernizira te financira na razni državnih politika. To je rezultiralo velikobrzinskim vlakovima koji danas povezuju sve veće europske gradove te kvalitetnom, ali ne i jeftinom uslugom, dobro prihvaćenom od strane korisnika. Željezница se danas u EU prepoznaće kao eколоška alternativa vrlo razvijenom cestovnom i zračnom prometu.

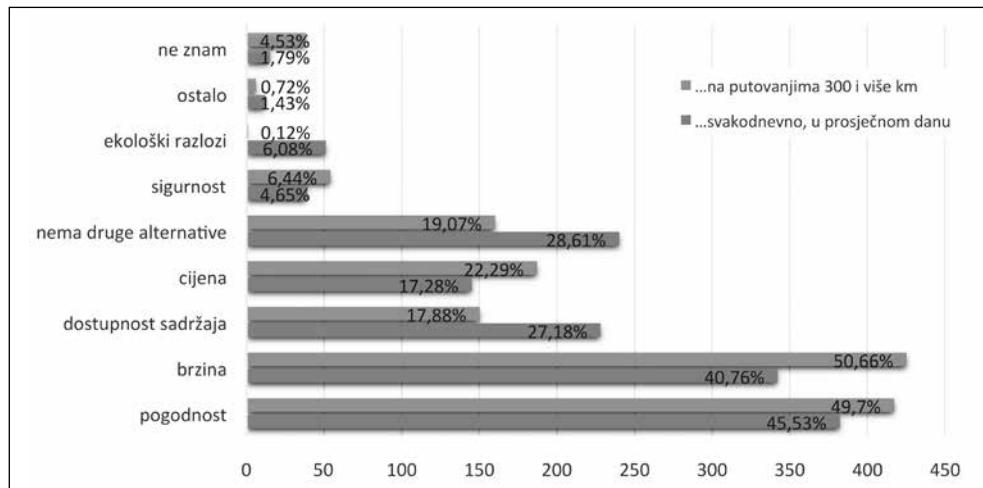
Za odabir prometnog sredstva na putovanjima duljim od 300 kilometara za polovicu su hrvatskih ispitanika najvažnije brzina i pogodnost, za otprilike petinu ispitanika cijena, potom slijedi nedostatak alternative. Utjecaj na okoliš se ne prepoznaće kao razlog određenog odabira prometnog sredstva (Grafički prikaz 1). Polovica njih ističe „pogodnost“ pa „brzinu“ kao najvažnije razloge odabira, slijede cijena i dostupnost sadržaja, odnosno njihova raspoloživost na lokacijama i u potrebnom obliku. Iako u malom broju, ispitanici spominju sigurnost, nedostatak alternative i zaštitu okoliša.

tourism-related motivations. The differences in shares indicate that the European market is much more developed with regard to the diversity of modes of transport used, suggesting that price is less important in the EU, while it is crucial for the people of Croatia. A larger range of diverse modes of transport always implies larger offers of different trips that help to broaden the market.

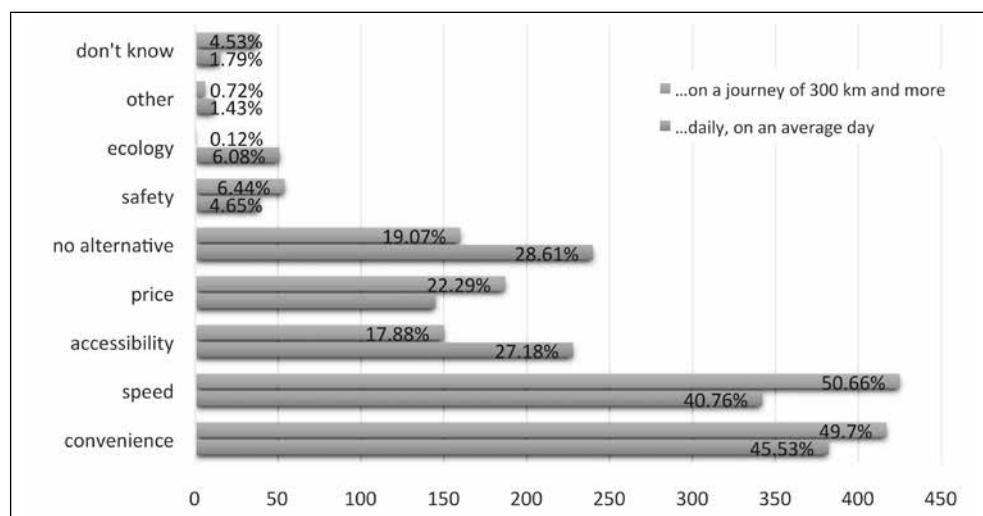
On a global scale, the European continent is specific for the role of its railways in passenger traffic. Europeans use rail transport to a certain extent (15%) because of high-quality service, an extensive network of railways and higher purchasing power in developed EU countries. In Croatia in 2016 the share was a mere 3.7%. Rail transport has historical roots, but that would account for little were it not for intensive efforts, made over decades and funded at the level of state policies, to develop and modernise rail transport. Such efforts have resulted in high-speed trains that today connect all larger European cities and in good-quality, but not necessarily cheap, services that are well accepted by users. Today in the EU, railways are recognised as an ecological alternative to highly developed road and air transport.

The most important factors in selecting a mode of transport for trips longer than 300 km are “speed” and “convenience” for half of the Croatian respondents, and “price” for about one-fifth, followed by “no alternatives”. Environmental impact is not recognised as a reason for selecting a specific mode of transport (figure 1). More than half of the European respondents reported “convenience” and “speed” as being the most important reasons behind their choice, followed by “price” and “available facilities”, that is, the availability of facilities in the locations and forms needed. A small portion of respondents mentioned “security”, “no alternatives” and “environmental protection” as reasons for their selection.

**Grafički prikaz 1: Usporedba razloga ispitanika za odabir prometnih sredstava u svakodnevnom kretanju i na periodičkim putovanjima dužim od 300 km**



**Figure 1: The comparison of factors influencing selection of traffic modes for average daily activities and longer journeys**



Mišljenjem o karakteristikama putovanja dužih od 300 km u 12 mjeseci prethodnih ispitivanju hrvatski ispitanici su bliški europskom prosjeku. Na listi elemenata kojima su najzadovoljniji hrvatski ispitanici misle isto što i oni u EU. Najzadovoljniji su sigurnošću, slijedi trajanje putovanja, raspoloživost sadržaja i usluga te vrijednost za no-

The opinions of Croatian respondents with regard to the characteristics of journeys longer than 300 km and undertaken in the 12 months prior to the survey (Table 1) are close to European averages. Croatian and EU respondents have similar opinions concerning the characteristics they are most satisfied with. These include safety, duration of

vac (Tablica 1). U tim elementima postotci se neznatno razlikuju između rezultata za Republiku Hrvatsku 2016. godine i Europsku Uniju (koji uključuje RH) 2014. godine.

the journey, availability of facilities and services, and value for money. The percentages for these elements differ slightly between the 2016 Croatian survey and the 2014 EU survey (with Croatia included).

**Tablica 1: Karakteristika putovanja od 300 i više km, poduzetih u godinu dana prije ispitivanja**

|                          | Sigurno (%) | Dovoljno sadržaja i usluga (%) | Vrijednost za novac (%) | Nije trajalo dulje od planiranog (%) |
|--------------------------|-------------|--------------------------------|-------------------------|--------------------------------------|
| <b>da</b>                | 90,82       | 59,71                          | 59,48                   | 63,77                                |
| <b>ne</b>                | 1,67        | 18,36                          | 18,24                   | 22,65                                |
| <b>ne znam</b>           | 7,03        | 20,74                          | 20,98                   | 12,99                                |
| <b>nije odgovorio/la</b> | 0,48        | 1,19                           | 1,31                    | 0,60                                 |
| <b>ukupno</b>            | 100,00      | 100,00                         | 100,00                  | 100,00                               |

**Table 1: The characteristics of journeys longer than 300 km, undertaken in the 12 month prior to the survey**

|                   | The journey was safe (%) | There were enough amenities for passengers (%) | The journey was good value for money (%) | Travelling did not take longer than planned (%) |
|-------------------|--------------------------|--|--|---|
| <b>yes</b>        | 90.82                    | 59.71  | 59.48                                    | 63.77   |
| <b>no</b>         | 1.67                     | 18.36  | 18.24                                    | 22.65   |
| <b>don't know</b> | 7.03                     | 20.74  | 20.98                                    | 12.99   |
| <b>no answer</b>  | 0.48                     | 1.19   | 1.31                                     | 0.60  |
| <b>total</b>      | 100.00                   | 100.00   | 100.00                                   | 100.00  |

Istraživanjem je također obuhvaćena i kvaliteta usluge po prometnim granama. Ovaj dio istraživanja je zanimljiv u kontekstu prethodnih pokazatelja za Republiku Hrvatsku prema kojima se kod putovanja na veće udaljenosti (dakle, uključujući i ona turistička) odabir odvija između automobila, autobusa i zrakoplova, za razliku od europske prakse koja uključuje i sredstva drugih prometnih grana. Poznavanje stavova korisnika o kvaliteti usluge u svakoj pojedinoj prometnoj grani (Tablica 2) može ukazati na smjernice prometnim politikama u oblikovanju ponude za turističke potrebe.

Research also encompassed the *quality of services by branches of transport*. This part of the study is interesting in the context of previous indicators for Croatia showing that for long-distance journeys (including tourism-motivated journeys) the choice is between car, coach or air transport, unlike European practice which involves other branches of transport as well. Knowing the attitudes of consumers with regard to service quality in each branch of transport (Table 2) can help point to transport policy guidelines in designing offers for tourists' needs.

**Tablica 2: Stavovi ispitanika o kvaliteti usluga pojedinih prometnih grana u 5 godina prethodećih istraživanju**

|                              | Cestovni promet (%) | Zračni promet (%) | Željeznički promet (%) | Vodni promet (%) |
|------------------------------|---------------------|-------------------|------------------------|------------------|
| <b>ponešto se poboljšala</b> | 50,06               | 30,63             | 7,99                   | 15,73            |
| <b>puno se poboljšala</b>    | 23,00               | 9,30              | 1,19                   | 1,31             |
| <b>ostala je ista</b>        | 18,47               | 22,17             | 24,31                  | 31,35            |
| <b>ponešto se pogoršala</b>  | 4,17                | 1,67              | 23,12                  | 3,81             |
| <b>puno se pogoršala</b>     | 2,15                | 0,48              | 18,95                  | 1,79             |
| <b>ne znam</b>               | 2,03                | 35,52             | 24,31                  | 45,77            |
| <b>nije odgovorilo</b>       | 0,12                | 0,24              | 0,12                   | 0,24             |
| <b>ukupno</b>                | 100,00              | 100,00            | 100,00                 | 100,00           |

**Table 2: Perception of transport service quality by branches of transport in Croatia in the last five years**

|                              | Road transport (%) | Air transport (%) | Rail transport (%) | Sea or river transport (%) |
|------------------------------|--------------------|-------------------|--------------------|----------------------------|
| <b>somewhat improved</b>     | 50.06              | 30.63             | 7.99               | 15.73                      |
| <b>improved a lot</b>        | 23.00              | 9.30              | 1.19               | 1.31                       |
| <b>stayed the same</b>       | 18.47              | 22.17             | 24.31              | 31.35                      |
| <b>somewhat deteriorated</b> | 4.17               | 1.67              | 23.12              | 3.81                       |
| <b>deteriorated a lot</b>    | 2.15               | 0.48              | 18.95              | 1.79                       |
| <b>don't know</b>            | 2.03               | 35.52             | 24.31              | 45.77                      |
| <b>no answer</b>             | 0.12               | 0.24              | 0.12               | 0.24                       |
| <b>total</b>                 | 100.00             | 100.00            | 100.00             | 100.00                     |

*Kvaliteta cestovnog prometa* (veza, usluga, infrastrukture) u posljednjih pet godina bolja je prema mišljenju gotovo 3/4 hrvatskih ispitanika 2016. godine u odnosu na prosječno europsko mišljenje (38%) 2014. godine (TNS Opinion & Social, 2014:5). Ovakav stav hrvatskih ispitanika ne iznenađuje jer je proteklih desetak godina izgrađena mreža autocesta sukladno najvišim sigurnosnim standardima.

Prometna zagušenja (72%) i održavanje prometnica (59%) za većinu ispitanika u Hrvatskoj najveći su problemi cestovnog prometa. Tek njih 40% navodi sigurnost, a

In the last five years the quality of *road transport* (links, services, infrastructure) has improved according to the opinions of almost three-quarters of Croatian respondents in 2016, compared with the average European opinions (38%) in 2014 (TNS Opinion & Social, 2014, 5). This attitude of Croatian respondents does not come as a surprise because the past ten years or so have seen the construction of a network of motorways according to the highest safety standards.

Most respondents in Croatia consider congestion (72%) and road maintenance (59%) to be the largest problems of road

petina zagađenje zraka i nedostatak cestovne povezanosti. Ispitanici u EU-u (TNS Opinion & Social, 2014:46) uglavnom ističu slične probleme, a listi problema troje od deset dodaje sigurnost (30%) i količinu teretnog prometa (27%).

Izdvojeno, korisnici željeznice, bicikla i JGP-a na svakodnevnoj osnovi u 2/3 slučaja ističu zakrčenost prometnika kao najveći problem. Oni također, u većoj mjeri nego korisnici motocikla i automobila te pješaci smatraju zagađenje zraka velikim problemom. Stav korisnika alternativnih modaliteta važan je zato što pokazuje da cestovni promet ne uzrokuje samo probleme onima koji ih neposredno generiraju, vlasnicima i korisnicima automobila, već i ostalim sudionicima prometa.

Iako su obuhvaćena putovanja različitih motiva i udaljenosti, putovanja motivirana turističkim razlozima dijele istu sudbinu pa je putovanje cestom teško opisati pridjevima ugodno, udobno, brzo, sigurno, neprekinuto, bez nepredviđenih događaja, bez negativnih utjecaja na čovjekovo zdravlje i osjetila (stres, buka, udisanje štetnih plinova i tvari, i sl.). Ako za trajanja vožnje turisti doživljavaju neugodu, nemoguće je nezadovoljstvo ograničiti, ono se širi i na ostatak putovanja – turističke elemente, pa na kraju ostaje nepovoljan dojam turističkim putovanjem u cjelini, bez obzira na visoku kvalitetu turističke ponude.

Iako je najčešći uzrok prometnih nezgoda ljudski faktor, bolje održavanje cesta smatra se *prioritetom u unapređenju sigurnosti cestovnog prometa* u Republici Hrvatskoj 2016. godine (63%). Više od polovice ispitanika smatra nultu toleranciju na alkohol (56%), a više od trećine (37%) strogo pridržavanje brzine i zabranu korištenja elektroničkih uređaja također važnim prioritetima. U Europskoj Uniji je također u podizanju sigurnosti cestovnog prometa najvažnije održavanje cesta, slijedi nulta tolerancija na alkohol, ograničenje brzine i zabrana korištenja elektroničkih uređaja (TNS Opinion & Social, 2014:5).

transport. Only 40% consider safety to be an issue, and one-fifth mentioned air pollution and the missing road links. EU respondents (TNS Opinion & Social, 2014, p. 46) generally reported similar problems, with three out of ten respondents adding safety (30%) and the amount of freight being transported by road (27%) to the list of issues.

In two-thirds of cases, respondents who use rail transport, bicycles and UPT on a daily basis reported road congestion as being the greatest problem. They also see air pollution as a much more serious issue than do motorcycle and car users and pedestrians. The attitudes of users of alternative modes are important as they demonstrate that road transport problems affect not only those who generate them (car owners and users) but other participants in traffic as well.

Tourism-motivated road journeys encounter the same issues as any other road trip, regardless of motivation or distances. Road journeys cannot always be described as pleasant, comfortable, quick, safe, without interruptions, without unforeseen events or any adverse effect on people's health and senses (stress, noise, inhaling harmful gasses and substances, etc.). If tourists experience something unpleasant during the journey, it is impossible to contain the dissatisfaction, which will spread over the rest of the journey and other tourism-related elements, resulting in an overall adverse impression of the trip, regardless of the high quality of the tourism offer.

Although the human factor is the most common cause of traffic accidents, better road maintenance is seen as *a priority in improving the safety of road transport* in Croatia in 2016 (63%). Zero alcohol tolerance is a priority to more than half of the respondents (56%), and strict adherence to speed limits and stricter control on the use of electronic devices while driving, to more than a third of respondents (37%). In the EU, road maintenance is the most important factor in improving the safety of road transport, followed by zero alcohol tolerance, speed limitations and prohibition of the use of elec-

Sigurnosni problem je, uz utjecaj na okoliš, najveći problem cestovnog prometa, ujedno i najveći problem prometa u cjelini za koji je najodgovorniji upravo cestovni promet. Prepoznavanje tog problema od strane sudionika u cestovnom prometu prvi je i, možda, najznačajniji korak u njegovu ublažavanju. Rezultati ovog istraživanja ukazuju na postojanje svijesti o njegovoj ozbilnosti i mjerama koje je potrebno poduzeti.

Najveći broj turista u svijetu koristi zračni promet, a nakon toga cestovni promet. U kontekstu takve uloge zračnog prometa pozitivnim se ocjenjuje rezultat istraživanja 2016. godine da je u posljednjih pet godina došlo do povećanja *kvalitete zračnog prometa* po mišljenju 40% ispitanika. Istraživanje koje je provedeno na razini EU, a odnosi se na Hrvatsku (TNS Opinion & Social, 2014:60) pokazuje znatno veći postotak (71%). Udio onih koji ne znaju je gotovo identičan kod oba istraživanja i to su oni koji vjerojatno ne koriste usluge te prometne grane. Među ispitanicima koji su u posljednjih 12 mjeseci koristili zračni promet većina smatra da je došlo do povećanja kvalitete usluga (57%).

Cijena putnih karata je za 2/3 ispitanika (69%) najveći *problem zračnog prometa*. Tek neznatno manji problem je malo određašta dostupnih iz najbliže zračne luke (59%). Slijede manjak zračnih luka, sigurnosni aspekt i zagađenje zraka. S identičnom listom prioriteta rezultati europskog istraživanja za Hrvatsku 2014. godine pokazuju minimalna odstupanja.

Cijena je najveći problem zračnog prometa i na razini EU-a, ali u manjoj mjeri (37%). Nakon toga navodi se zagađenje zraka, malo određašta dostupnih iz najbliže zračne luke te dostupnost JGP-a prema/od zračne luke. Ovakav stav je pomalo iznenadjujući u kontekstu ekspanzije i visokog udjela niskotarifnih prijevoznika u Europi koji uz niske cijene aktiviraju sekundarne zračne luke. Znatna razlika u postotku između Hrvatske i EU uvjetovana je platežnom moći, a jednim dijelom i činjenicom da je broj niskobudžet-

tronic devices while driving (TNS Opinion & Social, 2014:5).

The problem of safety, together with the environmental impact, is the greatest problem not only of road transport but of transport in general. Recognition of this problem by participants in road transport is the first and, perhaps, most important step in its alleviation. The results of this study indicate there is awareness of the problem and the measures that need to be taken.

Most tourists in the world use air transport, followed by road transport. Given the important role of air transport, the finding of the 2016 study that the *quality of air transport* has improved in the past five years according to 40% of the respondents, is encouraging. In the part of the EU study referring to Croatia (TNS Opinion & Social, 2014:60), that percentage is considerably higher (71%). The percentage of respondents who did not know whether air transport quality had improved (most likely because they do not use air transport services) was almost identical in both studies. Of the respondents who had used air transport in the past 12 months, the majority (57%) reported improvement in quality.

Two-thirds of respondents (69%) stated that the price of tickets is the greatest *problem of air transport*. A slightly lesser problem is the small number of destinations accessible from the nearest airports (59%). Other issues refer to the lack of airports, security aspects, and air pollution. The results for Croatia in the 2014 EU survey, with an identical list of priorities, differ minimally from the above findings.

Airfare is the largest problem of air transport at the EU level as well, but to a lesser extent (37%). Further problems are air pollution, lack of destinations accessible from the closest airport, and availability of public transport to and from the closest airport. That attitude is somewhat surprising, given the expansion and large share of low-cost carriers in Europe using secondary airports. The considerable difference in percentages

nih letova prema Hrvatskoj izvan turističke sezone vrlo mali. Priroda zračnog prometa je takva da su zračne luke udaljene od naselja, da je broj odredišta dostupan iz zračne luke u vijek ograničen i određen potražnjom, što znači da će ti elementi u vijek biti predmetom određenog nezadovoljstva jer ovaj oblik prometa ne može ponuditi elastičnost poput cestovnog prometa.

Zračne luke u Republici Hrvatskoj bilježe kontinuirani rast prometa, posebice tijekom ljetnih mjeseci, što je posljedica sve veće prisutnosti niskobudžetnih prijevoznika (LCC) i porasta broja linija od emitivnih tržišta do obalnih destinacija. Razloge ovakvog trenda treba tražiti u atraktivnosti turističke ponude Hrvatske te u pogodnostima niskobudžetnih prijevoza za korisnike. Tome svakako pridonosi relativno veliki broj zračnih luka u obalnom dijelu Republike Hrvatske, u kombinaciji s dobro organiziranom ponudom cestovnih usluga na lokalnoj razini, što hrvatske destinacije čini brzo i jednostavno dostupnima.

Zračni je promet posebno osjetljiv na sigurnosni aspekt pa se on dodatno istražio *ograničenjem unosa tekućine u zrakoplov*. Ovo je istraživanje pokazalo kako u Republici Hrvatskoj 2016. godine (kao i u Europskoj Uniji 2014. godine u cjelini) putnici koji su u posljednjih 12 mjeseci putovali zrakoplovom u manjoj mjeri smatraju ovu odredbu bitnom. Ne pretjerano važnim ili uopće nevažnim to smatra 53% ispitanika. Ipak, zabrana unošenja tekućina u zrakoplov je u određenoj mjeri izvor nezadovoljstva putnika. Stoga treba kvalitetnijim informiranjem ukazivati na pozitivne strane takve mjere.

Ovo je istraživanje prethodno ukazalo na značajnu ulogu željeznice u mobilnosti građana EU. Svega 10% ispitanika u Hrvatskoj 2016. godine smatra da se *kvaliteta željezničkog prometa* poboljšala, a 2/3 misle da se pogoršala ili ostala ista. U usporedbi sa stavovima o kvaliteti cestovnog i zračnog prometa u Hrvatskoj, željeznički promet je velika većina ispitanika ocijenila negativno.

between Croatia and the EU is the result of purchasing power and the fact that the number of low-cost flights to Croatia in the off-season is very small. Due to the nature of air transport, airports tend to be located at some distance from towns and cities, and the number of destinations accessible from an airport is always limited and determined by demand. Thus, these elements will always generate dissatisfaction as air transport is not capable of providing the flexibility that road transport can.

Croatian airports are seeing a steady upward trend in traffic, particularly in summer months, as a result of the growing presence of low-cost carriers (LCCs) and the growing number of flights from outbound markets to coastal destinations. The reasons behind this trend can be found in the appeal of Croatia's tourism offer and in the benefits of low-cost travel for passengers. The trend is also fuelled by the fairly large number of airports located on the Croatian coast, in combination with a well-organized road-service offer at the local level, ensuring fast and easy access to Croatian destinations.

As security is a particularly sensitive issue in air transport, additional research focused on the restriction to *bringing liquids on board aircrafts*. The 2016 survey in Croatia (as well as the 2014 EU survey as a whole) shows that only a small portion of passengers who travelled by air in the past 12 months found this provision to be important. For 53% of the respondents this is not very important or not important at all. Nevertheless the ban on carry-on liquids in aircrafts is, to a certain extent, a source of passenger dissatisfaction. Therefore better information should be provided to passengers to highlight the positive side of this measure.

Earlier on, this study pointed to the important role of railways in the mobility of EU citizens. Only 10% of respondents in Croatia in 2016 considered that the *quality of rail transport* had improved, while two-thirds thought that the quality had deteriorated or remained the same. Compared to the atti-

Rezultat europskog istraživanja za Hrvatsku je gotovo identičan.

Listu *najvećih problema željezničkog prometa* u Hrvatskoj 2016. godine čini održavanje infrastrukture (48%), nepostojanje brzih linija (42%), nedostajuće veze (36%), nepostojanje pouzdane i točne usluge (35%), kvaliteta usluga i sadržaja u vlakovima tijekom putovanja (29%). U Europi se pokazuje potpuno različita slika željezničkog prometa – najveći je problem cijena putne karte što je uvjetovano velikim brojem brzih vlakova, i ostalim troškovima koji su usmjereni na održavanje sigurnosti, brzine, i ostalih usluga na terminalima i u vlaku (TNS Opinion & Social, 2014:6). Posljedično na negativnu ocjenu željezničkog prometa, njegova uloga u mobilnosti u Hrvatskoj je vrlo mala. U cilju povećanja kvalitete usluge potrebno je djelovati na sve elemente željezničkog sustava. To iziskuje strategijski pristup, vrijeme i kapital. Razvoj željezničkog prometa nema alternativu zbog ekološke i sigurnosne dimenzije, ali i brojnih drugih prednosti u realizaciji koncepta mobilnosti.

Vodni je promet velikim dijelom uvjetovan turističkim motivima. Stoga ne čudi da je *kvaliteta vodnog prometa* nepoznаница за gotovo polovicu (46%) hrvatskih ispitanika 2016. godine, 31% smatra da je ostala ista, a 17% da se poboljšala. U Europskoj Uniji gotovo je isti udio ispitanika koji misle da se kvaliteta poboljšala i da je ostala ista (TNS Opinion & Social, 2014:6), ali čak 62% ispitanika nije bilo u stanju odgovoriti na to pitanje (TNS Opinion & Social, 2014:79). Među onima koji su u posljednjih 12 mjeseci bili na putovanju vodnim prometom, udio onih koji smatraju da se kvaliteta poboljšala (48%) je puno veći (TNS Opinion & Social, 2014:6). Uočljivo veliki udio ispitanika koji nisu mogli odgovoriti na pitanje, vjerojatno zato jer nisu plovili morem, rijekom ili jezerom, je u disproporciji s ponudom putovanja, geografskim predispozicijama i životnim standartom većine stanovnika EU-a, ali potencijal-

tudes on the quality of road and air transport in Croatia, rail transport was rated poorly by the large majority of respondents. The results of the 2014 EU study with regard to Croatia are almost identical.

The greatest *problems of rail transport* in Croatia in 2016 were rail maintenance (48%), lack of high-speed lines (42%), missing railway links (36%), lack of reliable and punctual services (35%) and the quality of services and facilities on board trains during travels (29%). In the EU, the situation regarding rail transport is completely different: the biggest problem is the price of tickets as a result of the large number of high-speed trains and other costs for ensuring security, speed and other services at train terminals and on board (TNS Opinion & Social, 2014:6). Given the poor rating of rail transport, its small role in mobility in Croatia is not surprising. To enhance the quality of services, action would need to be taken with regard to all elements of the railway system. This would require a strategic approach, time and capital. There is no alternative, however, but to develop and improve rail transport for its environmental and security dimensions and the many other advantages it provides through the mobility concept.

*Water-based transport* is to a large extent motivated by tourism. Therefore, it is no surprise then that almost half of the Croatian respondents (46%) in 2016 knew nothing about the quality of water-based transport, while 31% considered that it had remained the same and 17%, that it had improved. In the EU, almost identical shares of respondents believed that the quality had improved or remained the same, while fully 62% of respondents were unable to answer the question (p. 79). Of the respondents who used water-based transport in the last 12 months, a much larger share (48%) believed that the quality improved. The noticeably large portion of respondents who could not answer the question – probably because they never sailed on a sea, river or lake – is in dispro-

no ukazuje na to da potencijali vodnog prometa u turizmu nisu dovoljno valorizirani.

Najveći *problem vodnog prometa* iz percepcije hrvatskih ispitanika 2016. godine jesu: nedostatak povezanosti (44%), cijena punе karte (39%) i zagađenje voda (26%). Istraživanje EU-a za Republiku Hrvatsku 2014. godine istaknulo je iste probleme, no redoslijed je drugačiji pa je na prvom mjestu cijena putne karte (39%), a slijede nedostatak povezanosti (28%) i nedovoljna frekvencija servisa (27%) (TNS Opinion & Social, 2014:39).

Promet putnika u hrvatskim riječnim lukama je od početka 2002. godine do danas povećan gotovo 100 puta i 2017. godine do stigao je gotovo 45 000 putnika na 335 pristajanja brodova. Prihvat riječnih brodova za krstarenje organiziraju Lučka uprava Osijek za luku Osijek, te Lučka uprava Vukovar za putnička pristaništa u Vukovaru, Ilok, Batini i Aljmašu. Od ukupnog putničkog prometa u 2017. godini 85% ostvarila je Lučka uprava Vukovar, a pristanište u Vukovaru čak 65%. Ovako dinamičan razvitak prometa riječnim krstarenjima rezultat je atraktivne turističke ponude istočne Slavonije koju treba unaprjeđivati kao osnovu za daljnji razvoj prometa putnika na krstarenjima.

U Hrvatskoj veliku ulogu ima pomorski promet zbog razvedenosti obale i velikog broja naseljenih otoka. Nedostatak povezanosti implicira nedostatak linija i nedovoljnu frekvenciju postojećih. Nizak životni standard rezultira nezadovoljstvom cijenom putne karte koja, iako subvencionirana od države, još uvijek ostaje previšoka kod učestalog korištenja linjskog servisa. Pomorski prijevoz je za otočko stanovništvo pretpostavka veze s kopnom, a za turiste tijekom sezone način kako stići do otočkih destinacija.

portion with the travel offer, geographical predispositions and living standards of most EU inhabitants. This, however, may indicate that the potentials of water-based transport in tourism were not valued sufficiently.

The major *issues of water-based transport* according to the perception of Croatian respondents in 2016 are a lack of sea or river transport links (44%), ticket prices (39%) and water pollution (26%). In the 2014 EU survey, Croatian respondents indicated the same issues but in a different ranking: ticket prices (39%) was first, followed by a lack of transport links (28%) and poor frequency of services (27%) (TNS Opinion & Social, 2014:39).

Since the beginning of 2002 passenger traffic in Croatian river ports has increased almost 100-fold, reaching up to 45,000 passengers and 335 dockings in 2017. The docking of river cruise ships at the Port of Osijek is organized by the Port of Osijek Authority while the Port of Vukovar Authority is responsible for the passenger ports of Vukovar, Ilok, Batina and Aljmaš. The latter port claimed an 85% share of total passenger traffic in 2017, with the passenger port in Vukovar accounting for no less than 65%. Such a dynamic development of river cruise traffic is the result of the attractive tourism offer of eastern Slavonia, which requires continuous improvement for further development of cruise passenger traffic.

Maritime transport has an important role in Croatia because of the country's highly indented coastline and numerous inhabited islands. The lack of transport links entails a shortage of line services and the insufficient frequency of existing services. Low living standards result in dissatisfaction with the full ticket price, which, although subsidised by the state, is still too high to allow the frequent use of line services. Maritime transport is a requirement for island population to reach the mainland, while for tourists it is a means of reaching the island destinations during the season.

### **3. ZAKLJUČAK**

Negativne utjecaje prometa na okruženje u gradovima i naseljima multipliciraju prometni tokovi vezani uz turiste. Turistički su prometni tokovi manje predvidivi i podložniji oscilacijama od prometne potražnje lokalnog stanovništva, a njihova struktura ovisi o odrednicama poduzetog turističkog putovanja i boravka u destinaciji. Upravljanje raznim aspektima prometne potražnje, koji se paralelno odvijaju područjem destinacije, izazov je koji se ne može rješavati povećanjem prometne ponude, odnosno prometnih kapaciteta.

Upravljanje mobilnošću je koncept koji u središte stavlja čovjeka i njegovu potrebu za kretanjem. Optimizacija mogućnosti postojeće prometne ponude nastoji se ostvariti promjenom ponašanja sudionika u prometu stimuliranjem odmaka od automobila i ponudom kvalitetne alternative. Na istraživanje stavova i ponašanja građana Republike Hrvatske u prometu 2016. godine primijenjen je instrumentarij referentnog istraživanja na razini EU-a (TNS Opinion & Social, 2014). Za potrebe razmatranja rezultata i formiranja zaključaka u ovom radu prikupljene su spoznaje grupirane u dvije cjeline: općenite odrednice svakodnevne mobilnosti te mobilnost u kontekstu turističkih putovanja.

Opći rezultati ukazuju na drugačiju poziciju prometa u Europskoj uniji u cjelini i u Hrvatskoj. Iako automobil ima dominantnu ulogu u dnevnoj mobilnosti, korisnici u EU imaju na raspolaganju barem dva različita modaliteta. U Hrvatskoj su potencijalne promjene mobilnosti otežane činjenicom da se sudionicima u prometu na mnogim relacijama nudi samo jedna prometna mogućnost.

Hrvatski građani sve više putuju, a njihove prometne navike na turističkim putovanjima (od 300 i više kilometara) obilježava korištenje automobila. Europski ispitanici u manjem postotku koriste automobil, a razlikuju se od hrvatskih ispitanika korištenjem željeznice. Primarni kriteriji za odabir pro-

### **3. CONCLUSION**

The adverse effects of traffic on the environment of cities and towns are multiplied by the traffic flows of tourists. Tourism-related traffic flows are less predictable and more susceptible to oscillations than the traffic demand of residents, and their structure depends on the characteristics of the tourists' journey to, and stay in, a destination. Managing the different aspects of concurrently occurring traffic demand in a destination is a challenge that cannot be addressed by improving the traffic offer and increasing traffic capacities.

Mobility management is a concept that centres on people and their need for movement. Efforts to optimise the existing traffic offer focus on changing the behaviour of participants in traffic by encouraging a shift away from the use of cars and by providing quality alternatives. The instruments used in the referential survey at the EU level (TNS Opinion & Social, 2014) were applied to the study on the attitudes and behaviour of Croatian citizens in traffic in 2016. To consider the results and draw conclusions, this paper focuses on two groups of findings, one referring to the general determinants of daily mobility and the other to mobility within the context of tourist travels.

General results indicate that the position of traffic in the EU as a whole differs from that in Croatia. Although automobiles play a leading role in daily mobility in both cases, traffic consumers in the EU have at their disposal at least two other, different modes of transport. Any possible changes to mobility in Croatia are hindered by the fact that only one mode of transport is available in many areas.

Croatian citizens are traveling more and more, and their traffic habits on tourist trips (of 300 km or more) are marked by the use of automobiles. The EU respondents use automobiles in smaller percentages and differ from Croats in the use of rail transport.

metnog sredstva u Hrvatskoj i EU su brzina i pogodnost.

Stavovi ispitanika o kvaliteti prometnih usluga po prometnim granama pokazuju percepciju poboljšanja kvalitete cestovnog i zračnog prometa u proteklih pet godina. U vodnom je prometu, kao i u zračnom, evidentan veliki udio ispitanika koji nisu koristili navedene usluge. Najveća razlika u percepciji kvalitete usluge između europskih i hrvatskih ispitanika uočena je u željezničkom prometu.

Zaključno, istraživanje je pokazalo da postoje i sličnosti i razlike u iskustvima hrvatskih i europskih ispitanika. Sličnosti su prisutne u ulozi prometa u svakodnevnim aktivnostima te u ulozi cestovnog i zračnog prometa kod duljih putovanja. Određene razlike u stavovima ukazuju na moguće pravce djelovanja nositelja prometnih politika u Republici Hrvatskoj. Najveća razlika je uloga željeznice u kretanju jer za razliku od razine EU, u Hrvatskoj nije prepoznata kao prometni oblik značajan za mobilnost - svakodnevnu ili turističku.

Općenito gledajući, rezultati istraživanja EU 2014. godine su Hrvatsku uglavnom svrstavali u skupinu država s manje razvijenim prometnim sustavima i skromnim dosezima dnevne i turističke mobilnosti. Razlika od dvije godine u provođenju ova dva nezavisna istraživanja, ali po identičnoj metodologiji, može se smatrati dodatnom vrijednošću jer je pokazala blagi pozitivni trend pojedinih elemenata mobilnosti u Hrvatskoj. Također, istraživanje je realizirano u trenutku kada izostaje novi službeni barometar koji bi trebao pratiti trend na razini Europske Unije.

S obzirom na determinante poduzetog istraživanja i relativno kratki vremenski odmak u odnosu na referentno istraživanje, rezultati i zaključci ne mogu se smatrati reprezentativnim u smislu donošenja strategijskih odluka. Primjenjivost donesenih zaključaka donekle je ograničena uzorkovanjem. Ipak, veličina uzorka te uočena kretanja u stavovima i ponašanju sudionika u prometu in-

Speed and convenience are the primary criteria for selecting a mode of transport in both the EU and Croatia.

The attitudes of the respondents towards the quality of transport services by branches of transport point to a perceived improvement in the quality of road and air transport in the past five years. It is evident that a large share of the respondents did not use the services of either water-based transport or air transport. The greatest difference in the perception of service quality between EU and Croatian respondents can be noted with regard to rail transport.

In conclusion, the study shows that there are similarities and differences in the experiences of Croatian and EU respondents. Similarities refer to the role of transport in everyday activities and to the role of road and air transport in longer journeys. Certain differences in attitudes suggest possible lines of action for traffic policy makers in Croatia. The greatest difference is in the role of rail transport. Unlike in the EU, rail transport in Croatia is not recognised as a form of transport that is important for either daily or tourism-motivated mobility.

In general, the results of the 2014 EU survey placed Croatia in the group of countries with less-developed transport systems and with modest scopes of daily and tourism-related mobility. The two-year gap in conducting the two independent surveys, using identical methodology, added to the value of the Croatian survey, which revealed a slight upward trend in certain elements of mobility in Croatia. In addition, the survey was conducted at a time when there was no new official Eurobarometer survey to monitor trends at the EU level.

Given the determinants of the survey conducted and the relatively short time from the referential survey, the results and conclusions cannot be considered as representative in terms of strategic decision-making. The conclusions are of somewhat restricted use due to the sample construction. Neverthe-

dikator su potrebe za sustavnim pristupom bavljenju prometnom potražnjom i mogu predstavljati okvirne smjernice koje treba imati na umu prilikom definiranja razvojnih strategija prometa i turizma Hrvatske. Unapređenje postojećeg stanja mobilnosti, moguće razvojne pravce i fokus prometnih politika moguće je dijelom utemeljiti i na stavovima ispitanika prikupljenima i ovim istraživanjem.

less, the size of the sample and the changes in the attitudes and the behaviour of the participants in traffic indicate the need for a systematic approach to the issue of traffic demand and can serve as broad guidelines to take into consideration in formulating development strategies for traffic and tourism in Croatia. The attitudes of the respondents collected in this study could contribute to improvements to the existing state of mobility, future lines of development, and the focus of traffic policies.

## LITERATURA - REFERENCES

- Basaric, V., Djoric, V., Jevdjenic, A., Jovic, J. (2015). Efficient Methodology for Assessment of Targets and Policy Measures for Sustainable Mobility Systems. *International Journal of Sustainable Transportation*. Vol. 9. No. 3. pp. 217-226. DOI: <https://doi.org/10.1080/15568318.2012.756088>
- Enoch, M. (2012). *Sustainable Transport, Mobility Management and Travel Plans*. Surrey, England: Ashgate Publishing Limited.
- Freudendal-Pedersen, M., Hartmann-Petersen, K., Kjaerulff, A. A., Nielsen, L. D. (2017). Interactive environmental planning: creating utopias and storylines within a mobilities. *Journal of Environmental Planning and Management*. Vol. 60. No. 6. pp. 941-958. DOI: <https://doi.org/10.1080/09640568.2016.1189817>
- Grgurević, I., Dugina, M., Feletar, P. (2016). Research of the potential for carpooling in the cities of Koprivnica and Križevci. *Podravina: časopis za multidisciplinarna istraživanja*. Vol. 15. No. 30. pp. 135-155
- Kovačić, N. (2014). *Hotelski logistički proizvod u ponudi sportskoga turizma*. Opatija: Fakultet za menadžment u turizmu i ugostiteljstvu.
- Litman, T. (2003). *Sustainable Transport: Mobility Management*. Bonn: GTZ Transport and Mobility Group.
- Longo, G., Medeossi, G., Padoano, E. (2015). Multi-criteria analysis to support mobility management at a university campus. *Transportation Research Procedia*. Vol. 5. pp. 175-185. DOI: <https://doi.org/10.1016/j.trpro.2015.01.019>
- Malasek, J. (2016). A Set of Tools for Making Urban Transport More Sustainable. *Transportation Research Procedia*. Vol. 14. pp. 876-885. DOI: <https://doi.org/10.1016/j.trpro.2016.05.059>
- Martinez, L. M., Correia, G., Viegas, J. M. (2015). An agent-based simulation model to assess the impacts of introducing a shared-taxi system: An application to Lisbon (Portugal). *Journal of Advanced Transportation*. Vol. 49. No. 3. pp. 475-495. DOI: <https://doi.org/10.1002/atr.1283>
- Nechita, E., Crisan, G. C., Obreja, S. M., Damian, C. S. (2016). Intelligent carpooling system: A case study for bacau metropolitan area. *Intelligent Systems Reference Library*. Svezak 107. pp. 43-72.
- Papagiannakis, A., Vitopoulou, A. (2015). An urban strategy in time of crisis: Mobility management and low-cost public space design. *Spatium*. Vol. 1. No. 33. pp. 1-7. DOI: <https://doi.org/10.2298/SPAT1533001P>

- Rahier, M., Ritz, T., Wallenborn, R. (2015). Information and communication technology for integrated mobility concepts such as E-Carsharing. *Green Energy and Technology*. Svezak 203. pp. 311-326.
- Rocci, A. (2015). How braking habits? Accompanying programs for travel behaviour change. *Espace-Populations-Societes*. pp. 1-2.
- TNS Opinion & Social. (2014). *Special Eurobarometer 422a "Quality of Transport"*. Brussels, Belgium: European Commission.
- UNWTO. (2017). *2017 International Year of Sustainable Tourism for Development - Official website*. available at: <http://www.tourism4development2017.org/> [accessed September 2017].
- Primljeno: 14.ožujka 2018. /  
Submitted: 14 March 2018  
Prihvaćeno: 26. lipnja 2018. /  
Accepted: 26 June 2018*
- Ovaj rad je u potpunosti podržan od strane Sveučilišta u Rijeci u okviru projekta pod nazivom Upravljanje opskrbnim lancem u ugostiteljstvu, broj 13.03.1.2.01.  
This work has been fully supported by the University of Rijeka under the project titled Supply chain management in hospitality, number 13.03.1.2.01.*
- Ovaj je rad izdan pod licencom CC BY-NC (<http://creativecommons.org/licenses/by-nc/4.0/>).  
This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>)