

## Part II Analysis and Reporting Features

 Austrian National  
Tourist Office  
[www.tourmis.info](http://www.tourmis.info)



20<sup>th</sup> TourMIS Workshop  
September 11-12, 2025

**T**  
**W** **OURMIS**  
**ORKSHOP**

# Overview of the afternoon

1. Basic statistics & monitoring trends (longitudinal analysis)
2. Benchmarking KPIs
  - Market volumes and market shares
  - Seasonality indicators
3. New: The database on Regional Tourism Statistics

15:00-15:30 coffee break

1. Estimating CO2 emissions caused by tourism transportation
2. New: The distribution of the average length of stay
3. The Future Developments of TourMIS

# City Travel Report by CityDNA



- Provides a vital perspective on the volume of urban tourism in Europe.
  - Bednights
  - Source markets
  - CO<sub>2</sub> emission
- **128** leading European cities analysed



# Measuring seasonality in European destinations

# Causes of seasonality in tourism

- **Seasonality: The systematic intra-year variation in visitation caused by exogenous factors**
  - Natural (e.g. climate)
  - Institutional
    - caused by the markets of origin (e.g. timing of school holidays)
    - caused by the destination (e.g. regular mega-events)
  - Calendar effects (e.g. Easter)
- **Challenges**
  - The need to **optimize the use of tourism infrastructure** such as roads to accommodate high flows during certain periods
  - Seasonality **increases the risk of high unemployment** during the low seasons
  - In dryer regions the issue of **water scarcity** is of particular concern

# Actions to overcome seasonality

- **Product**

Development of new offers, events, packages, ...

- **Pricing**

Providing discounts for periods with less demand

- **Promotion**

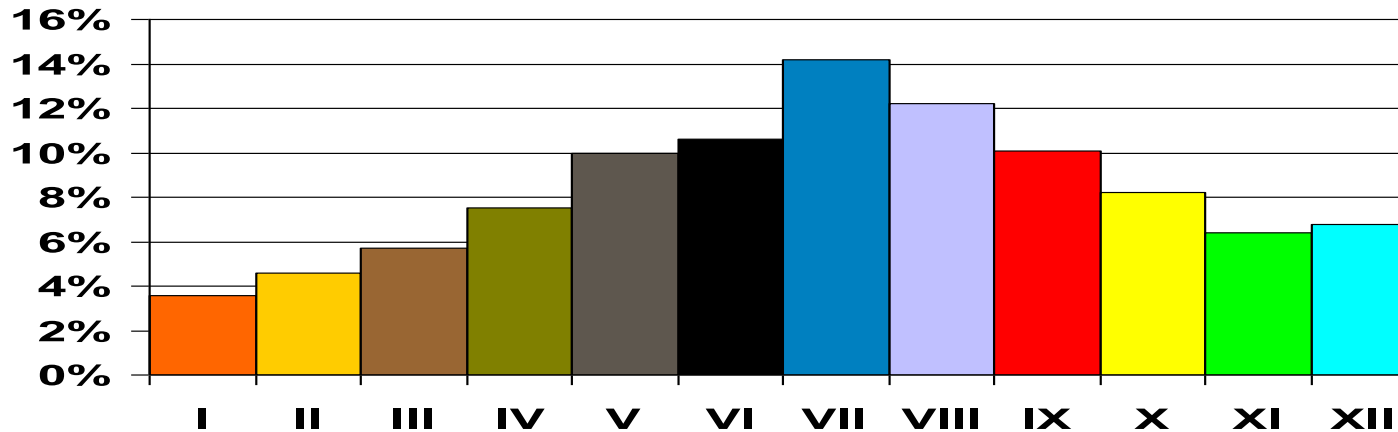
When and how intensively we will promote the tourism products

- **Placement**

Which geographic region/market should be promoted

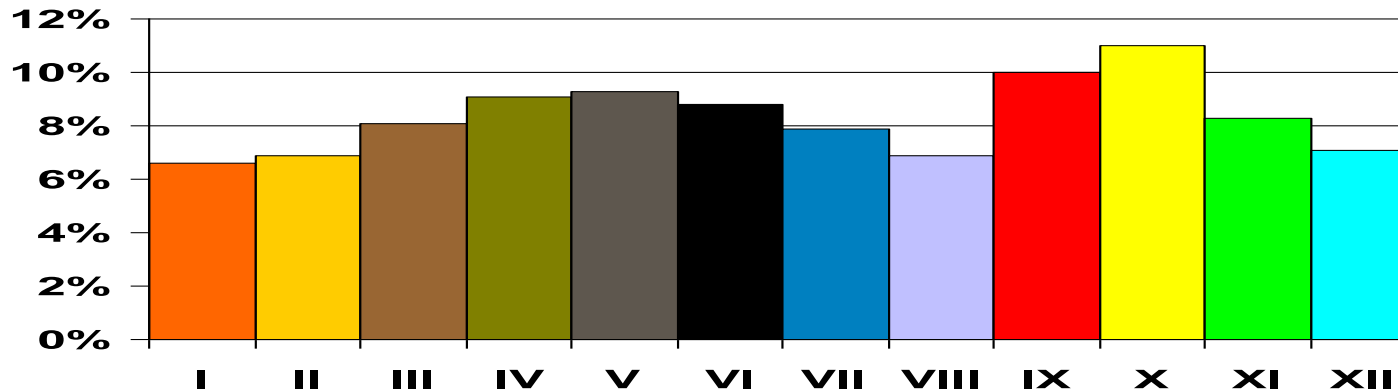
Which segments (e.g. young adults, families, business people)

# Gini coefficient



**LÜBECK**

**Gini=0.207**



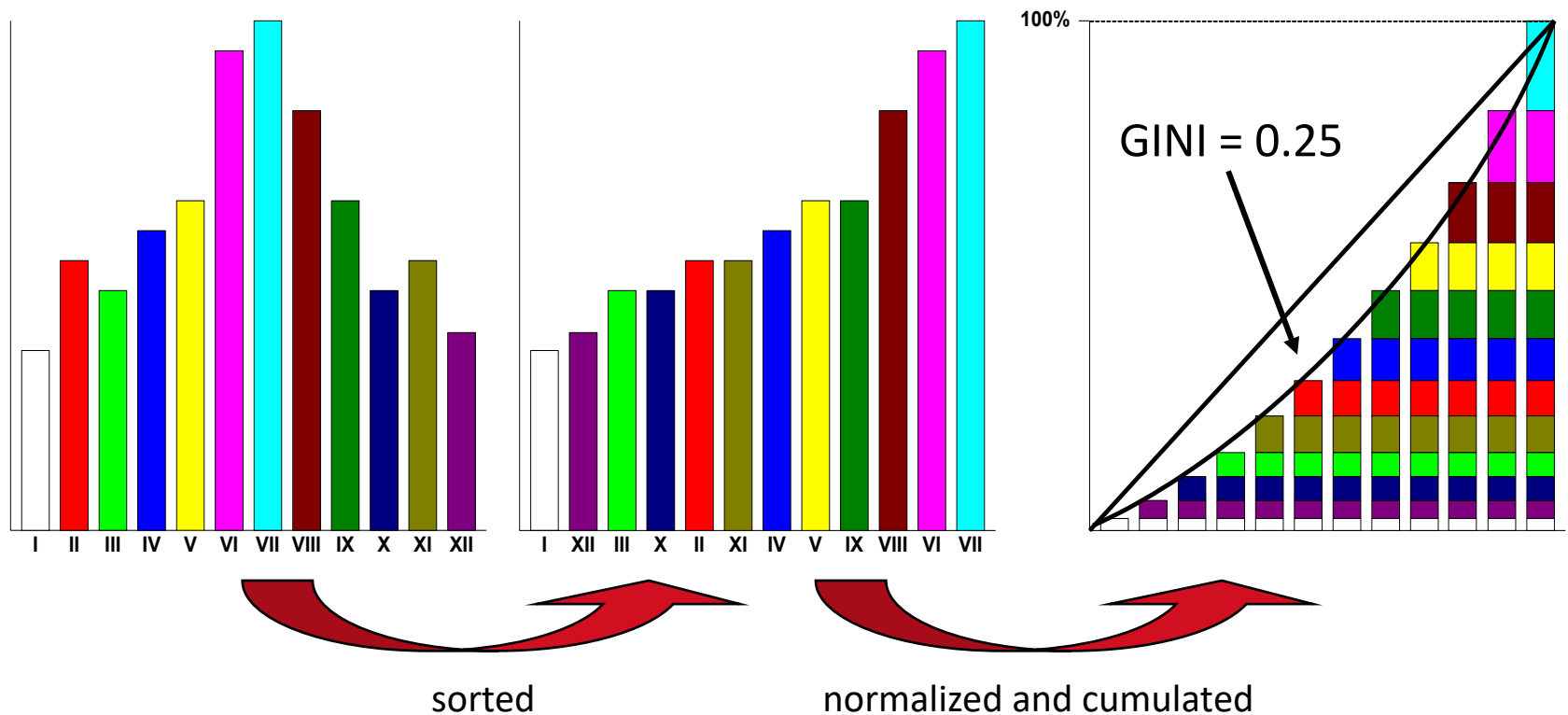
**MADRID**

**Gini=0.088**

# Gini coefficient

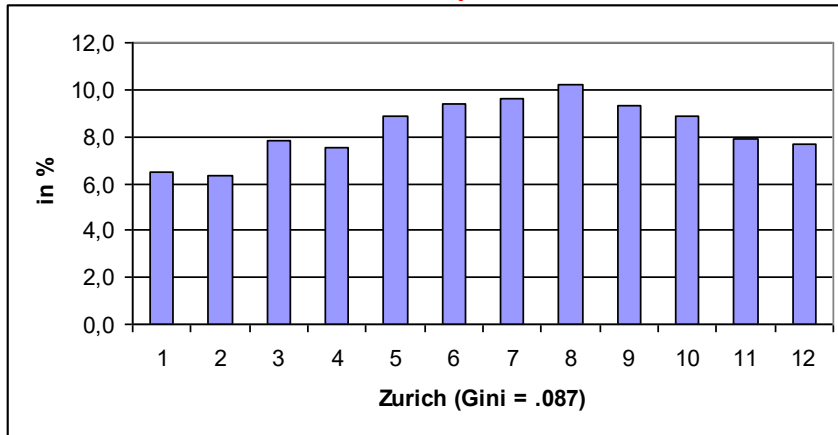
Measure of statistical dispersion. The Gini can be approximated

with trapezoids: 
$$G^* = 1 - \sum_{i=1}^{12} (X_i - X_{i-1}) \times (Y_i + Y_{i-1})$$

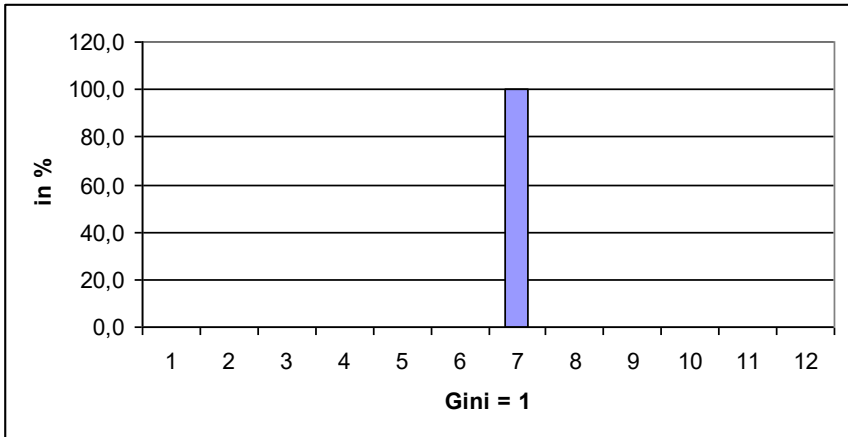
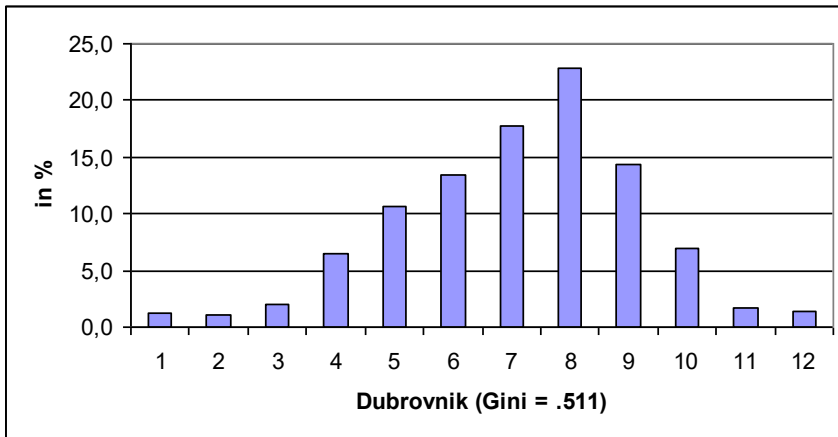
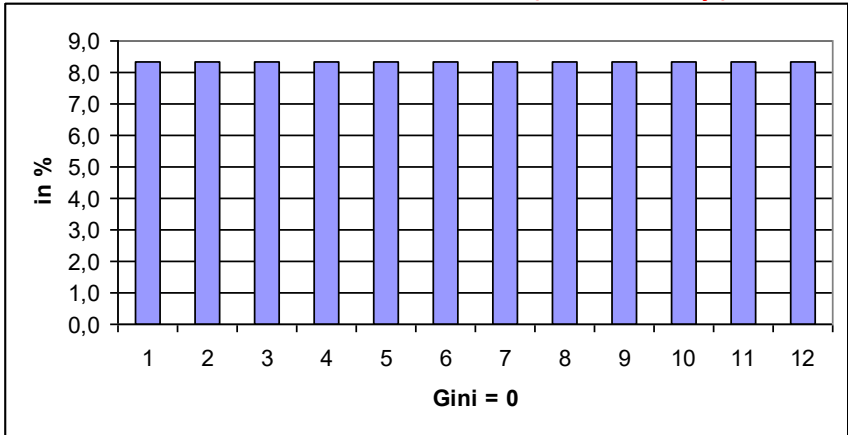


# Measuring seasonality

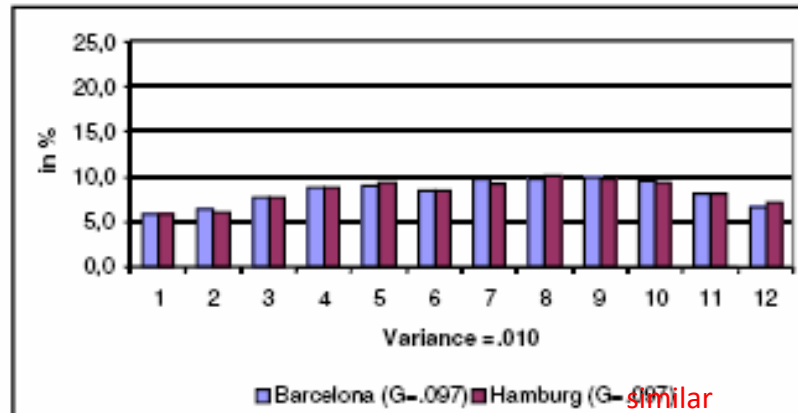
## Examples



## Extreme situations (in theory)

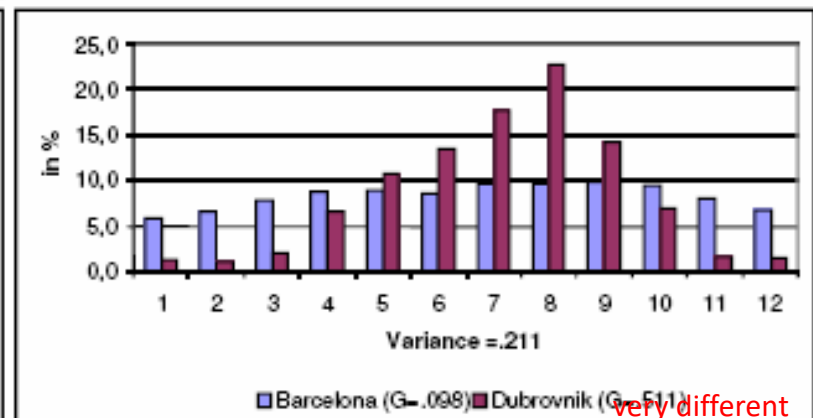
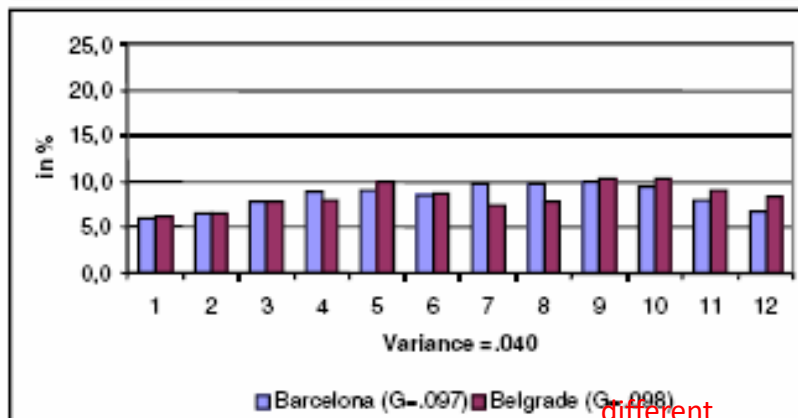


# Similarity of seasonal patterns



$$d = \sqrt{\sum_{i=1}^{12} (x_i - y_i)^2}$$

Similarity of seasonal patterns of two destinations. Multiple destinations?



# NEW Database on Regional Tourism Statistics

# APIs enable the Benchmarking of Regional Tourism Data in TourMIS

1. Netherlands - <https://opendata.cbs.nl>
  2. Norway - <https://data.ssb.no>
  3. Estonia - <https://andmed.stat.ee>
  4. Finland - <https://visitfinland.stat.fi>
  5. Denmark - <https://api.statbank.dk>
  6. Italy (planned)
  7. Spain (planned)
  8. Sweden (planned)
  9. Slovenia (planned)
  10. Switzerland (planned)
  11. Austria (planned)
  12. Portugal (eventually)
- Update checks scheduled two times a week
  - Adjustments during the updating process are possible (e.g. Estimation of monthly data based on quarterly data; calculation of the larger urban area by adding data from different municipalities; calculating all paid forms of accommodation establ.)

## 4 measures compiled for regions

1. Arrivals of tourists in *all paid forms of accommodation establishments*
2. Arrivals of tourists in *hotels and similar establishments*
3. Bednights of tourists in all paid forms of accommodation establishments
4. Bednights of tourists in hotels and similar establishments
5. Number of all paid forms of accommodation establishments (units)
6. Number of bedspaces in all paid forms of accommodation establishments
7. Average occupancy rate in all paid forms of accommodation establishments
8. Number of hotels and similar establishments (units)
9. Number of bed spaces in hotels and similar establishments
10. Average occupancy rate in hotels and similar establishments

No preferred definition option for regions

## Regional Tourism Statistics (Sep 2025)

<b>Austria</b>	<b>9</b>
<b>Belgium</b>	<b>13</b>
<b>Denmark</b>	<b>16</b>
<b>Estonia</b>	<b>21</b>
<b>Finland</b>	<b>19</b>
<b>Norway</b>	<b>81</b>
	<b>159</b>

# Regions (NUTS and LAU ...)

## Denmark

## Estonia

1. Copenhagen City
2. Copenhagen Region
3. Province  
Nordsjælland
4. Province Bornholm
5. Province Østsjælland
6. Province Vest- og  
Sydsjælland
7. Province Fyn
8. Province Sydjylland
9. Province Østjylland
10. Province Vestjylland
11. Province Nordjylland
12. Nordjylland
13. Midtjylland
14. Syddanmark
15. Hovedstaden
16. Sjælland

1. Harju county
2. Harju county, excl.  
Tallinn
3. Hiiu county
4. Ida-Viru county
5. Järva county
6. Jõgeva county
7. Lääne county
8. Lääne-Viru county
9. Pärnu city as a  
settlement unit
10. Pärnu county
11. Pärnu county, excl.  
Pärnu city
12. Põlva county
13. Rapla county
14. Saare county
15. Tartu city as a  
settlement unit
16. Tartu county

17. Tartu county, excl.  
Tartu city
18. Valga county
19. Viljandi county
20. Võru county
21. Tallinn

# Regions Norway

1. Rogaland	25. Østfold	49. Risør/Tvedestrand	73. Sør-Troms/Senja-region
2. Stavangerregion	26. Akershus	50. Arendal/Grimstad	74. Nord-Troms-region
3. Haugesund/Haugeland	27. Romerike/Hadeland	51. Kristiansandregion	75. Vest-/Indre-Finnmark
4. Ryfylke	28. Buskerud	52. Lindesnes/Lyngdal	76. Øst-Finnmark
5. Møre og Romsdal	29. Norefjell/Ringerike	53. Vestre-Agder	77. Troms - Romsa - Tromssa
6. Nordmøre/Romsdal	30. Innlandet	54. Setesdal	78. Finnmark -Finnmárku - Finnmarkku
7. Ålesund/Sunnmøre	31. Hedmark-region	55. Vestland	79. Oslo
8. Nordland - Nordlândia	32. Lillehammer-region	56. Bergensregion	80. Trondheim
9. Bodø	33. Gjøvikregion	57. Fjordkysten	81. Tromsø
10. Vesterålen/Narvik	34. Ringsaker	58. Sunnhordland	
11. Helgeland	35. Trysil	59. Hardangerfjord	
12. Salten-region	36. Østerdalen	60. Voss	
13. Lofoten	37. Nord-Gudbrandsdal	61. Sognefjord	
14. Svalbard	38. Valdres	62. Sunnfjord	
15. Svalbard	39. Hortenregion	63. Nordfjord	
16. Haldenkanalen	40. Tønsbergregion	64. Trøndelag - Tröndelage	
17. Mosseregion	41. Sandefjord/Larvik	65. Innherred	
18. Sarpsborg	42. Grenland	66. Namdalen	
19. Fredrikstad/Hvaler	43. Øst-Telemark	67. Hitra/Frøya	
20. Drammensregion	44. Midt-Telemark	68. Fosenregion	
21. Kongsbergregion	45. Vest-Telemark	69. Oppdal	
22. Follo	46. Vestfold	70. Rørosregion	
23. Asker/Bærum	47. Telemark	71. Orkdalsområdet	
24. Hallingdal	48. Agder	72. Værnesregion	

# Finland

1. Uusimaa
2. Southwest Finland
3. Satakunta
4. Kanta-Häme
5. Pirkanmaa
6. Päijät-Häme
7. Kymenlaakso
8. South Karelia
9. South Savo
10. North Savo
11. North Karelia
12. Central Finland
13. South Ostrobothnia
14. Ostrobothnia
15. Central Ostrobothnia
16. North Ostrobothnia
17. Kainuu
18. Lapland
19. Åland

# Regions Belgium

1. Province of Antwerp
2. Province of Eastern-Flanders
3. Province of Flemish-Brabant
4. Flemish Region
5. Province of Hainaut
6. Province of Liege
7. Province of Limburg
8. Province of Luxemburg
9. Province of Namur
10. Walloon Region
11. Province of Brabant-Wallon
12. Province of West-Flanders
13. Brussels

# Austria

1. Burgenland
2. Carinthia
3. Lower Austria
4. Upper Austria
5. Salzburg
6. Styria
7. Tirol
8. Vorarlberg
9. Vienna

# Annual Statistics

- General Information +
- Tourism Data Space +
- European Countries +
- Regions -
  - ▶ Annual nights & arrivals
  - ▶ Monthly nights & arrivals
- Cities +
- Austria +
- My TourMIS +
- Data entry +
- Logout

## Regions >> Nights and arrivals >> Annual data

		For one destination	
		1 or 2 year(s)	Trend
Nights and arrivals		REG-J3: for various markets	REG-J4: for a market
		REG-J7: for various markets and benchmark	REG-J9: for a market and benchmark
			REG-J1: for all definitions
			REG-J14: for on market and several years
Length of stay		REG-J12: for various markets	
		REG-J23: in days per stay (estimated)	
Sustainability		REG-J24: sustainability indicators	
		For one market	
		1 or 2 year(s)	Trend
Nights and arrivals		REG-J2: in all destinations	REG-J11: in all destinations
Length of stay		REG-J13: in all destinations	
Combining markets and destinations			
		REG-J15: Comparison of the diversity of the guest mix	
		REG-J8: All markets versus all countries (arrivals or nights)	

## 14 new tables

Missing: transportation-caused CO2 emissions; density & intensity; sustainability indicators limited

# Monthly Statistics

- General Information ☐
- Tourism Data Space ☐
- European Countries ☐
- Regions ☐
  - ▶ Annual nights & arrivals
  - ▶ Monthly nights & arrivals
- Cities ☐
- Austria ☐
- My TourMIS ☐
- Data entry ☐
- Logout

## Regions >> Nights and arrivals >> Monthly data

		For one destination	
		1 or 2 year(s)	Trend
Nights and arrivals		REG-M3: for various markets	REG-M5: for one market and several months
		REG-M6: assessing seasonality	
		REG-M9: comparison of months or seasons	
Length of stay		REG-M10: for various markets	REG-M12: for one market and several months
		For one market	
		1 or 2 year(s)	Trend
Nights and arrivals		REG-M2: in all destinations (one month)	
		REG-M7: benchmark seasons	
Length of stay		REG-M11: in all destinations	
Combining markets and destinations			
		REG-M13: diversity of guest mix	

## 10 new tables

Missing: (Last available figures); density & intensity

# Next possible steps (TBD)

- More data interfaces
  - NUTS or LAU?
  - Markets, annual, monthly, type of accommodation establishments?
  - Adjustments needed?
  - Capacities (bedspaces, accommodation units, occupancy rates)
- Manually entered data
  - Size of destination, GEO codes, population numbers
  - Attractions & sights
- Analysis & reporting
  - More tables/views (e.g. Latest trends, capacities, availability & definitions)
  - Adjustments needed?
  - Cross-cutting analyses (countries – regions – cities)

# Leading Network for Regional Tourism in Europe



Network of European Regions  
for Sustainable and  
Competitive Tourism