

Role of Public Transportation in the Resiliency of Rural Coastal Communities

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Why Study Rural Areas?

- **40% of the country's transit dependent population lives in rural areas**
- **Rural areas are often underserved by public transportation**
- **Emergency transit use information is readily available for urban areas but lacking in rural locations**

Objective

To assess the emergency preparedness of public transportation in rural coastal communities in the Gulf Coast region.

The assessment focuses on:

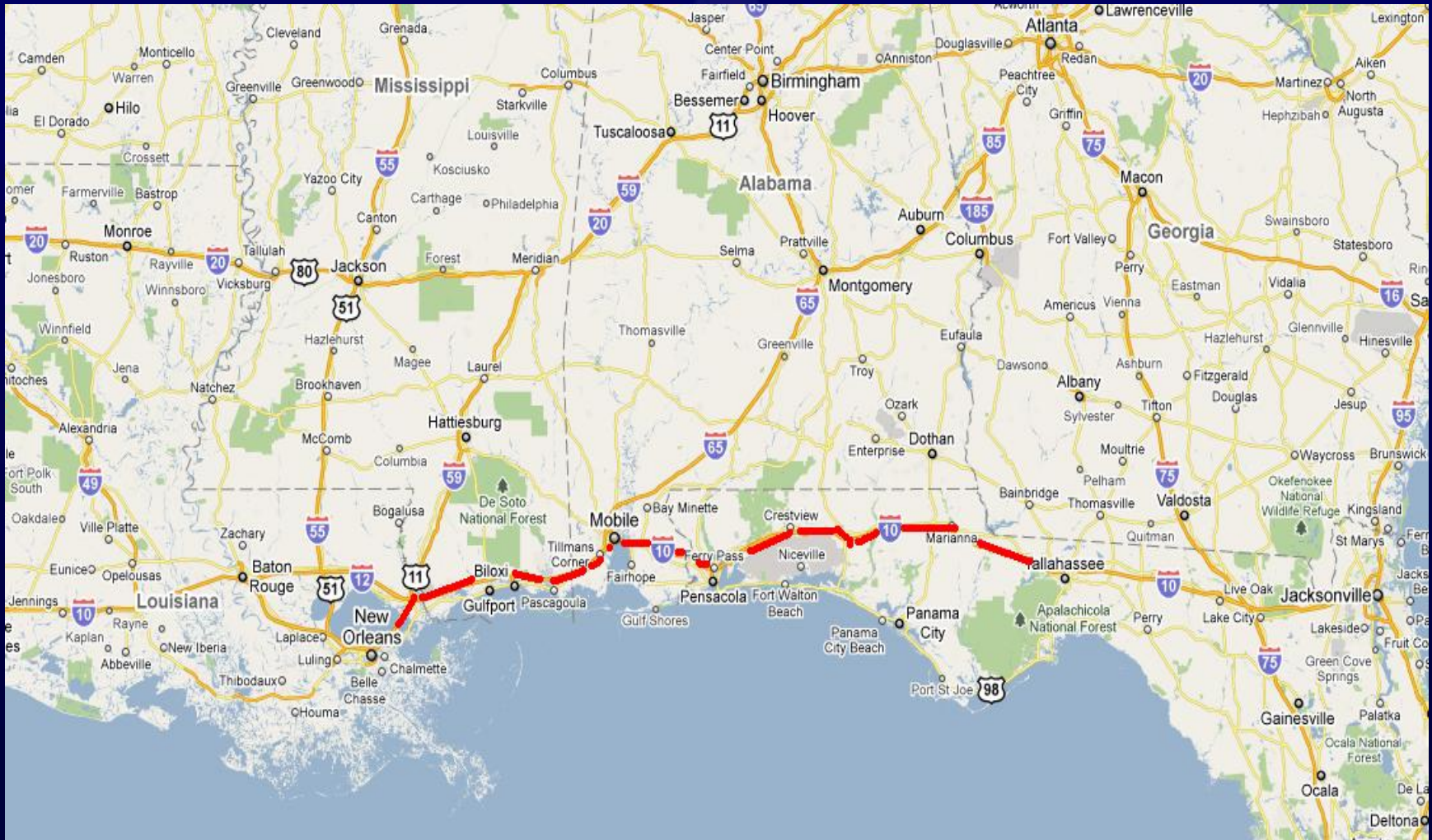
- how adequately transit systems are prepared**
- what role they can play in the event of an emergency/evacuation**

Transit's Role in Evacuation

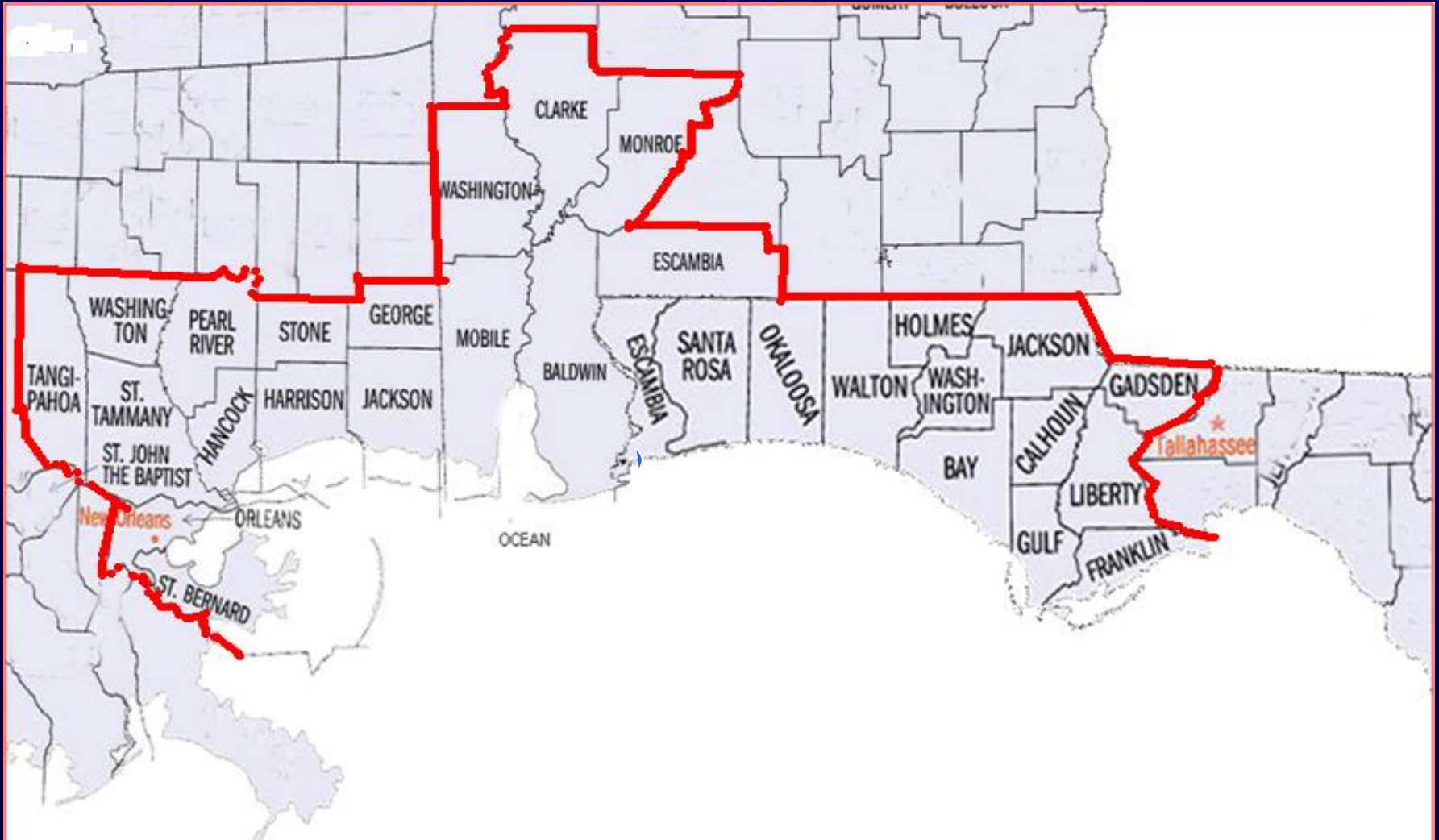
Public transportation can perform multiple roles in four tasks of emergency management planning:

- (1) Mitigation
- (2) Preparedness
- (3) Response
- (4) Recovery

Study Area



Study Area

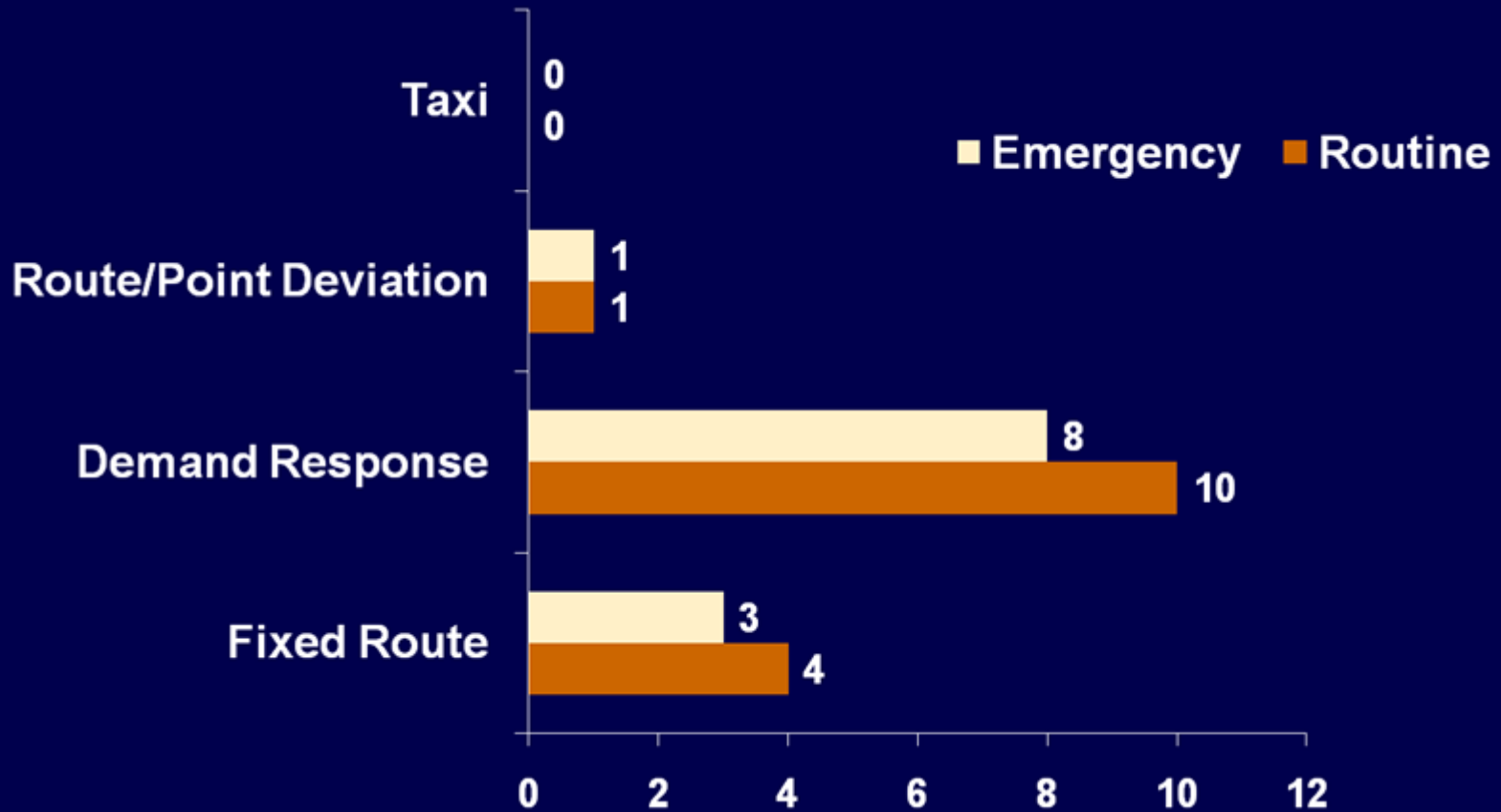


24 counties and 4 parishes along the I-10 corridor from Florida to Louisiana

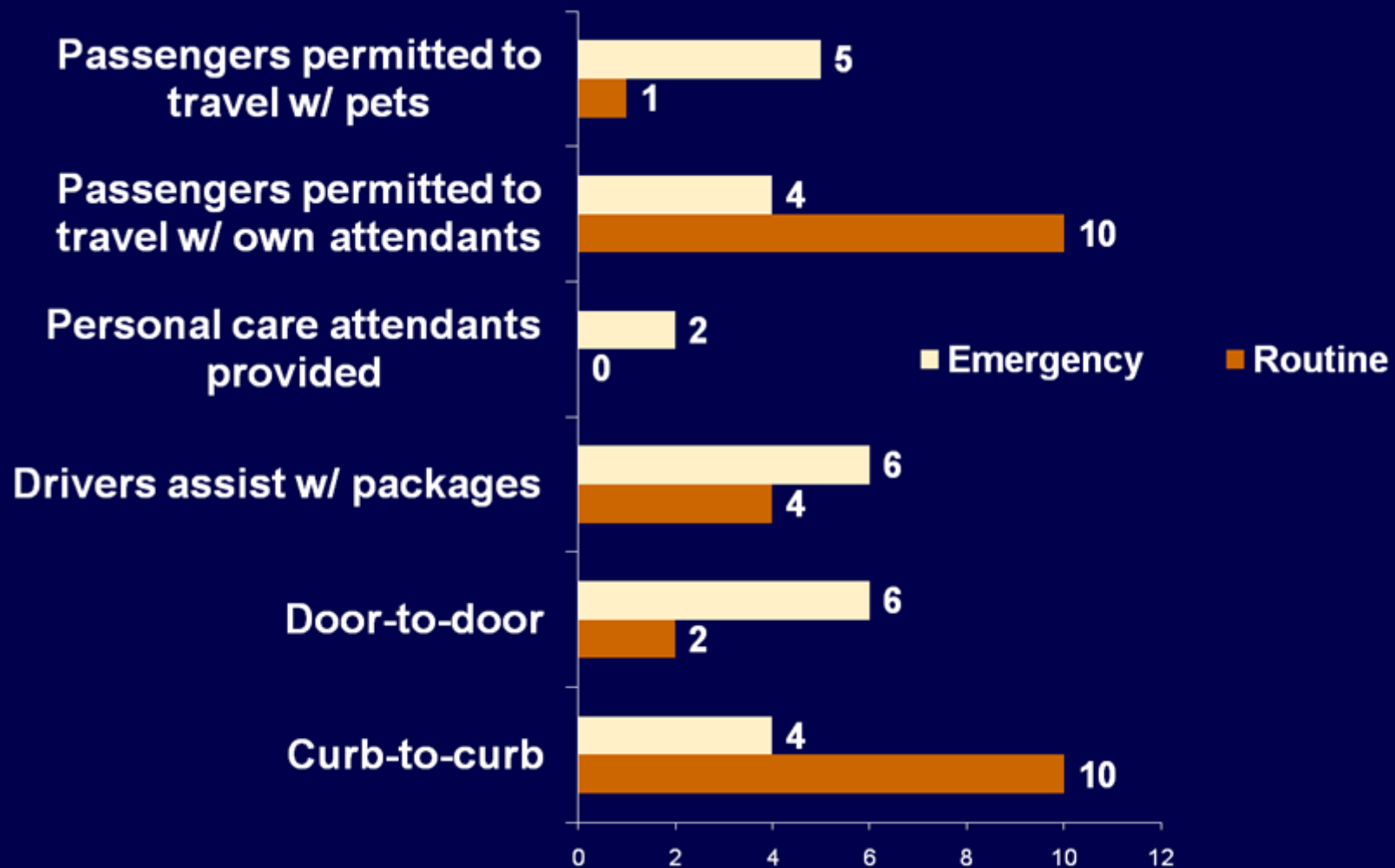
Survey Methodology

- Surveys were distributed to 46 public, private and school transportation agencies within the study area
- 24 surveys were returned (52% response rate) 14 from public transportation agencies and 10 from school bus systems
- Major topics
 - Transit Services Provided in Rural Areas
 - Communication Systems Used for Transit
 - Emergency Event Issues
 - Employee Issues
 - Evacuation Preparation
 - Transit Expenditure and Evacuation Assessment of Needs/Coordination

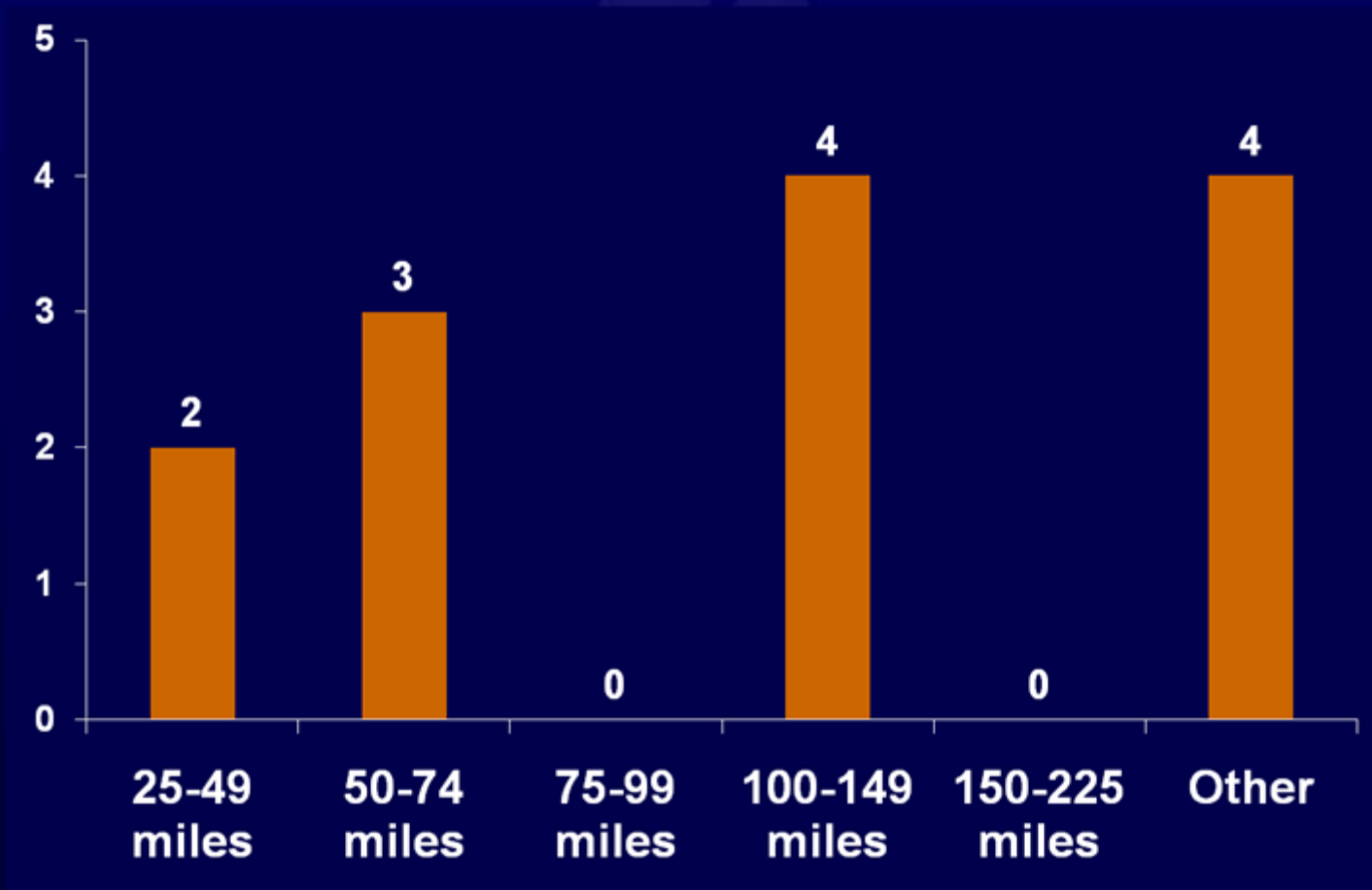
Modes of Transit Delivery



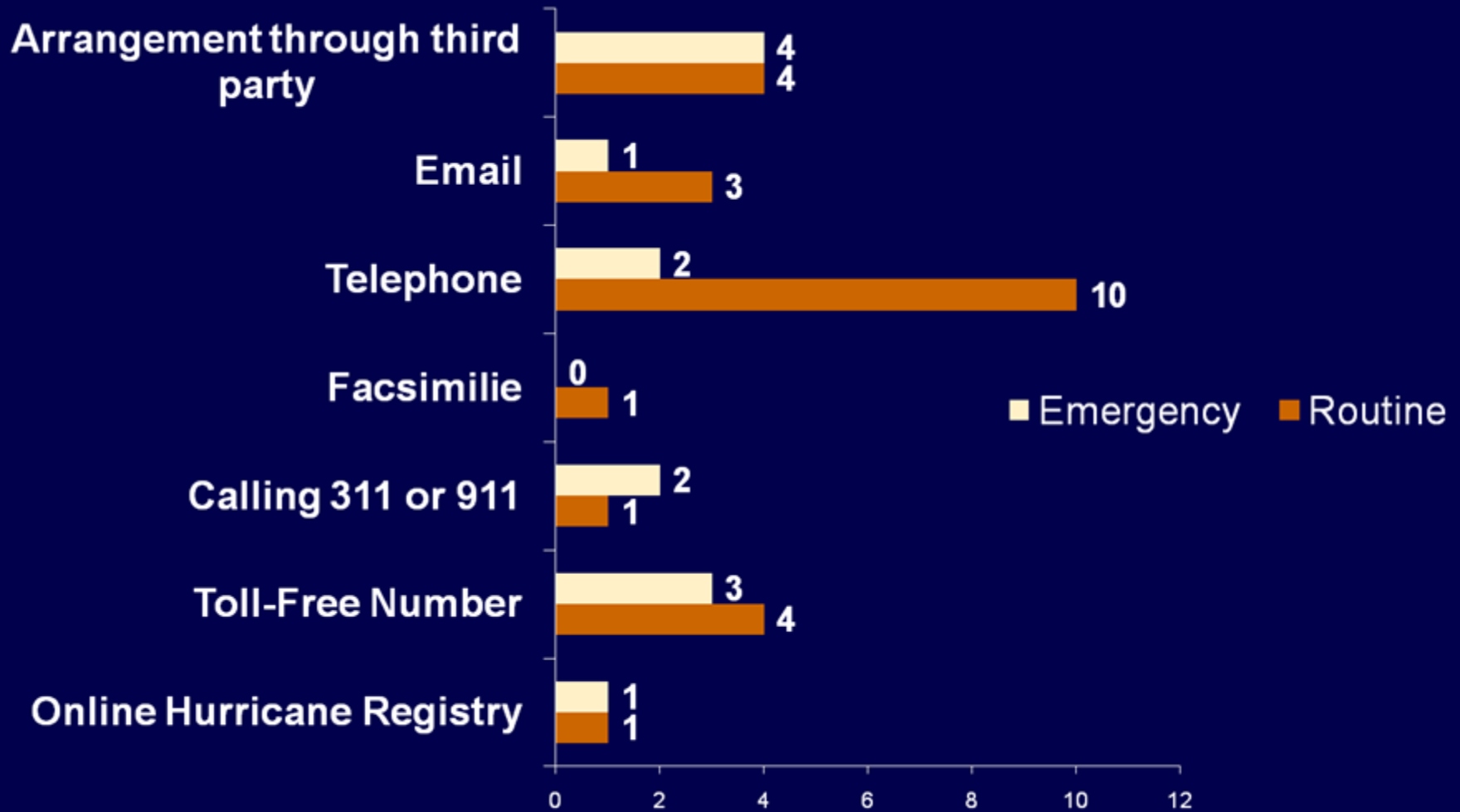
Level of Passenger Assistance



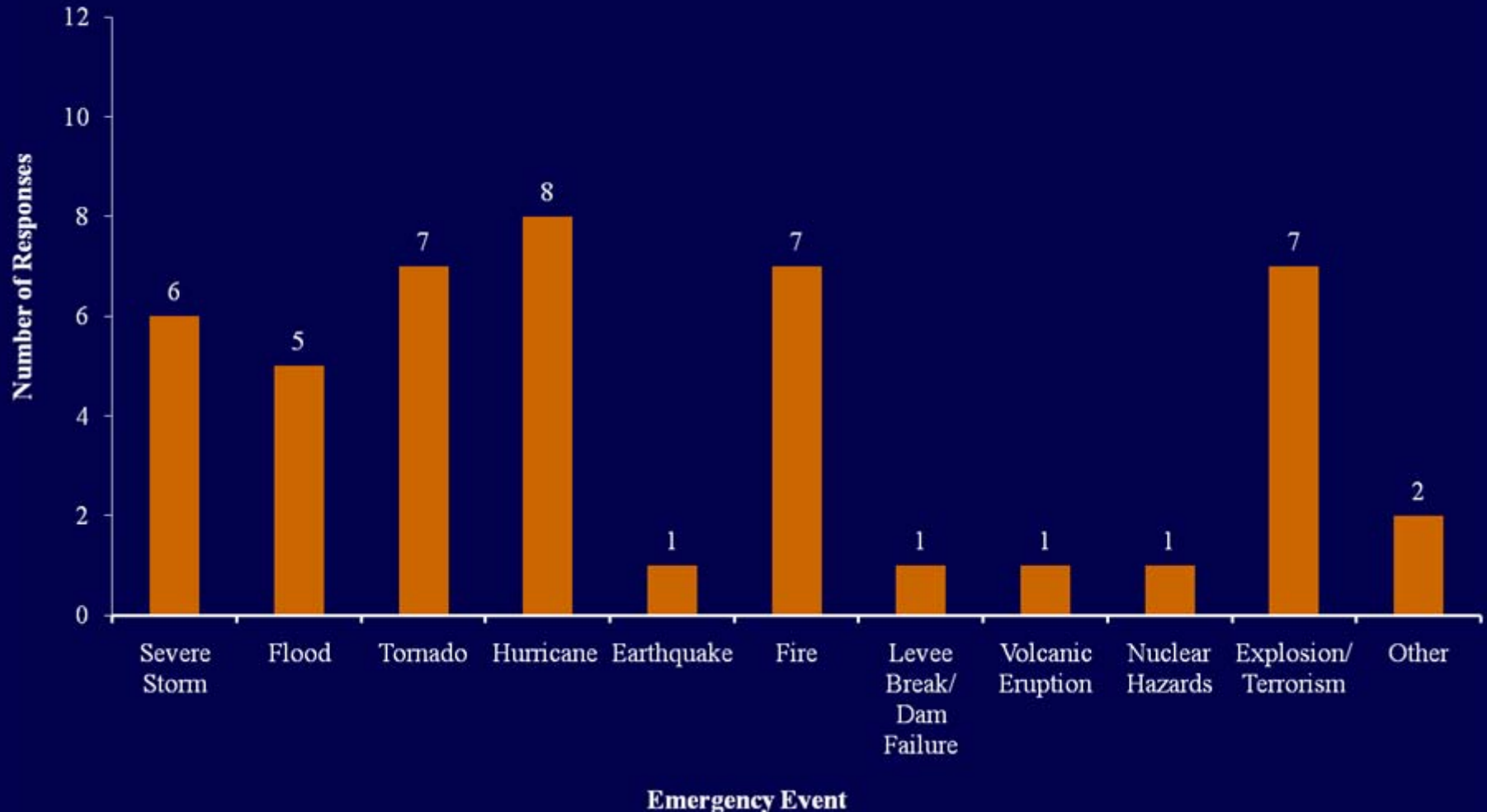
Maximum Travel Distance



Communication Sources for Riders



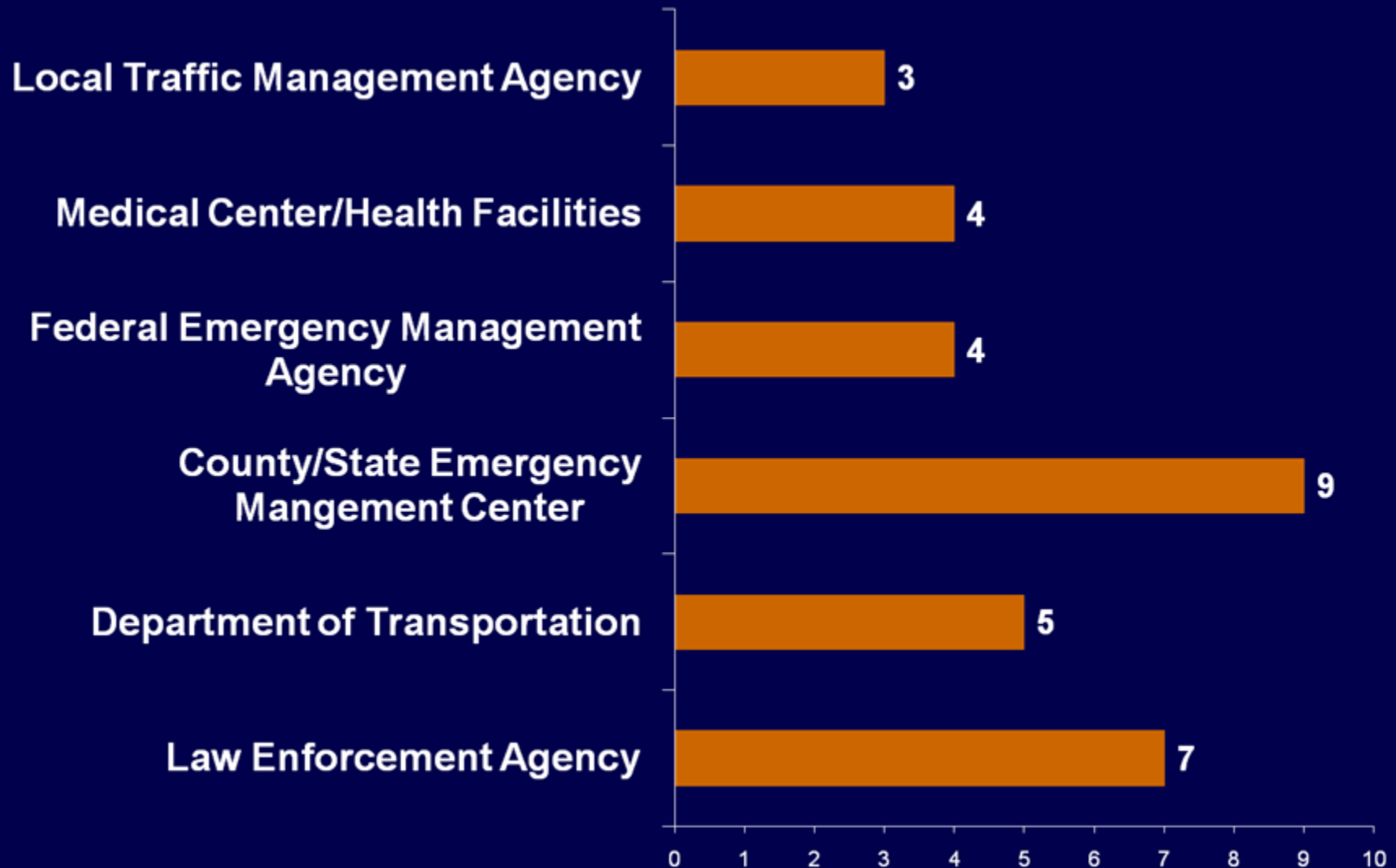
Planning For Emergency Events



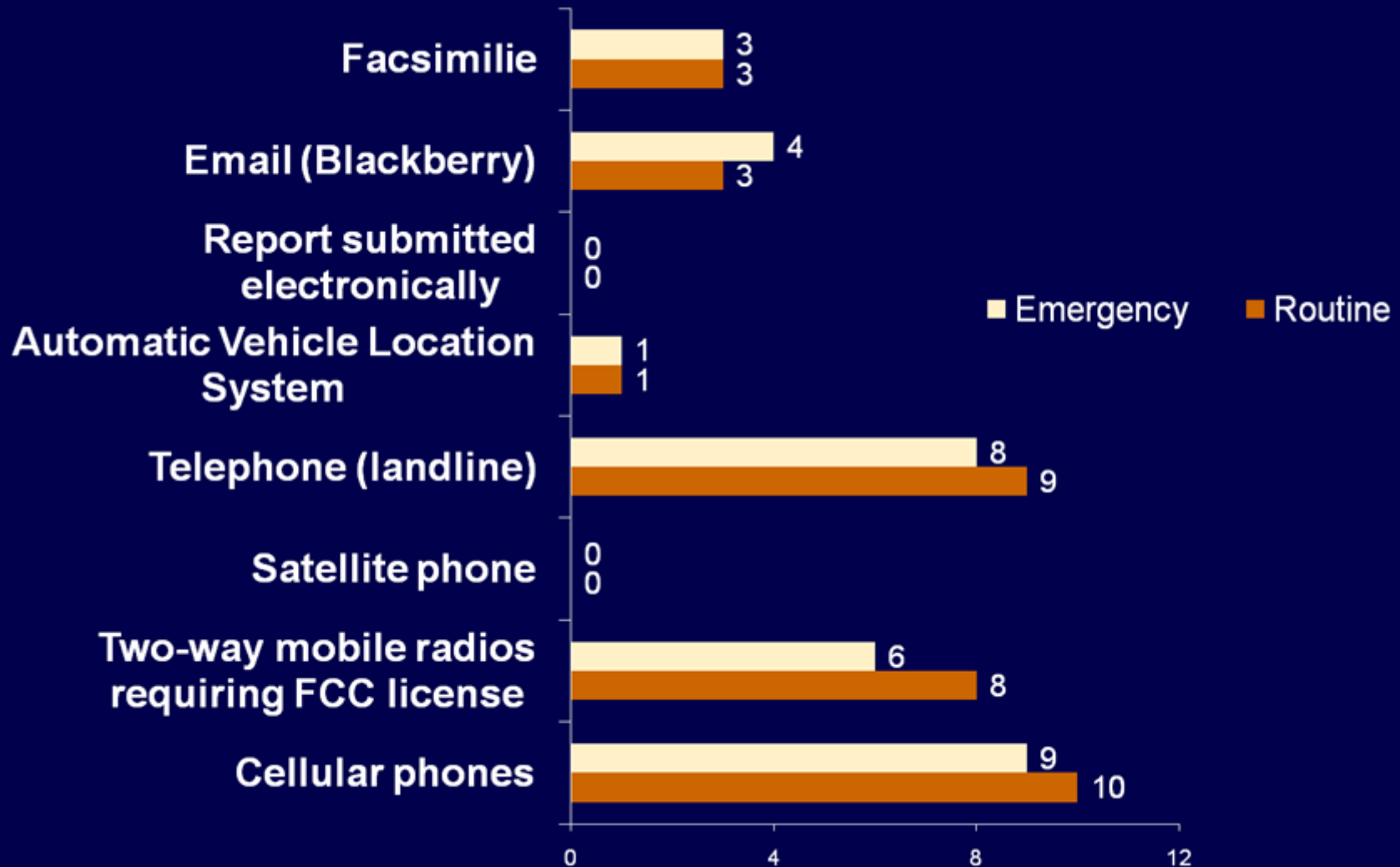
Vehicle Fleet

Vehicle Type	Total Passenger Capacity (No. of Seats)	Total Number of Vehicles	Total Number of Wheelchair Accessible Spots
• Cars	599	35	0
• Sport Utility Vehicles (SUVs)	47	6	1
• Minivans	470	34	16
• Standard 15-passenger vans	750	51	21
• Converted 15-passenger vans (<i>e.g.</i> , raised roof, wheelchair lift)	395	59	90
• Light-duty bus (body-on-chassis type capacity between 16-24 passengers)	1,117	61	52
• Medium duty bus (body-on-chassis type capacity over 22 passengers)	1,191	28	35
• School bus (yellow school bus capacity between 20 and 76 students)	61,640	791	120
• Medium or heavy duty transit bus	840	30	33

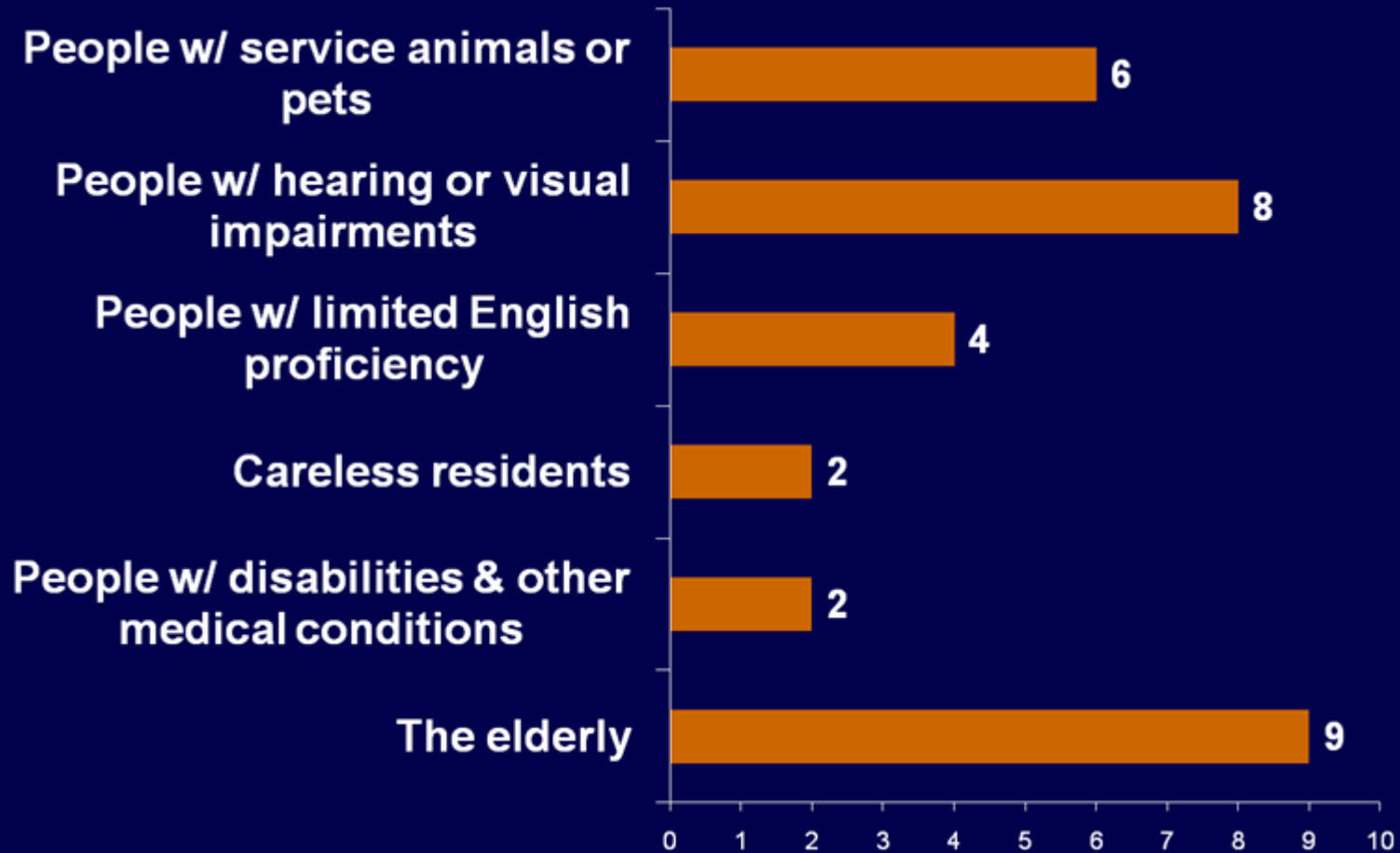
Established Communication Protocols w/ Agencies



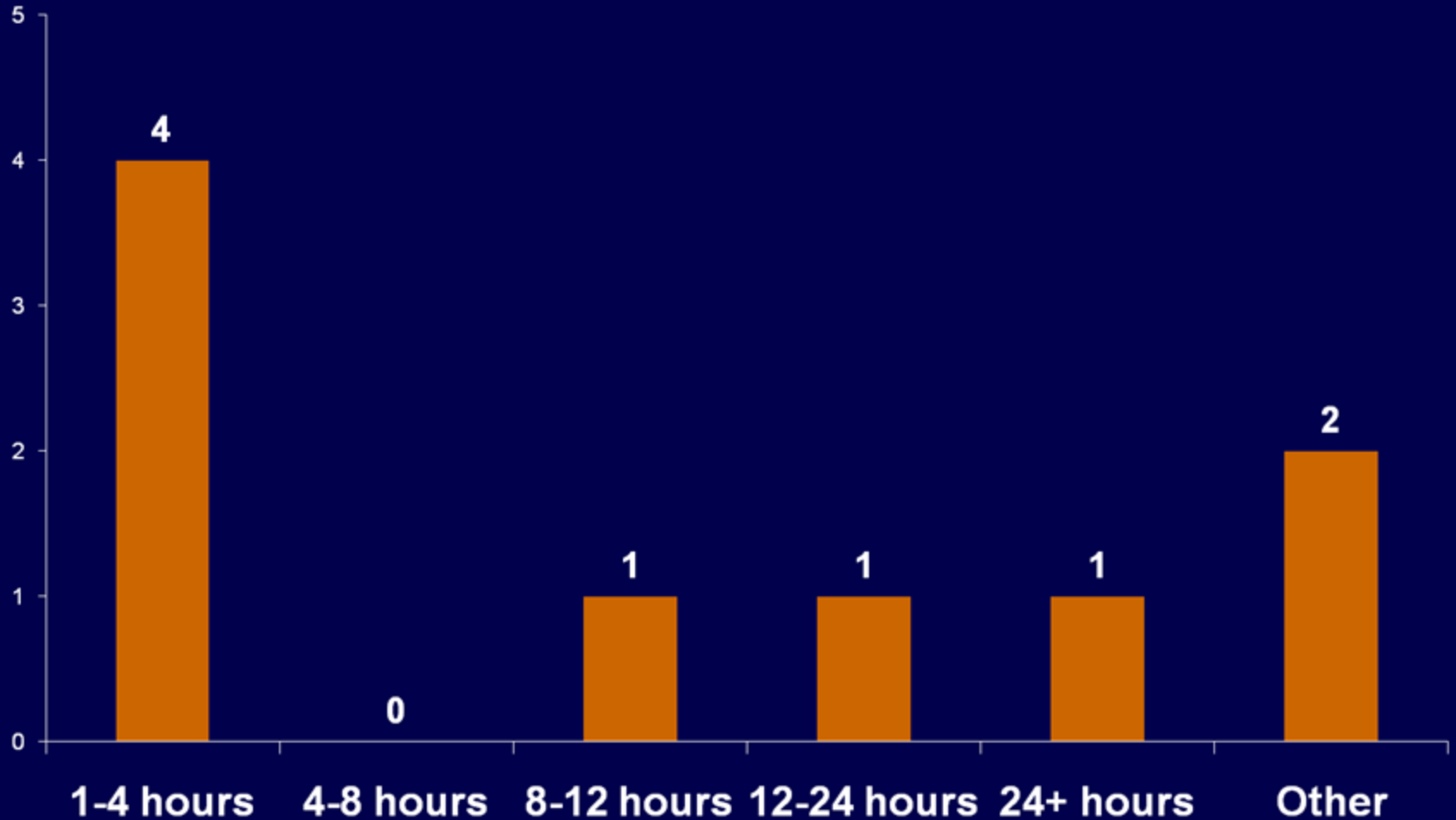
Communication Systems for Coordination



Employees Trained For...



Evacuation Preparation Time



Assessment of Needs/Coordination

Barriers/Obstacles	Emergency Management Activity			
	Mitigation	Preparedness	Response	Recovery
Having to plan ahead	6	5	4	4
Lack of operating budget	7	8	5	4
Funding restrictions to provide service	4	4	4	3

Conclusion

- Respondents fulfilled their assigned role within their own local emergency management operations
- Role is largely limited to the 'preparedness' activity of emergency management
- Transit services are active in improving coordination, conducting regular mock-drills, increasing participation of people and transit, and establishing service aid agreements

Questions



References:

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- Google Maps. www.maps.google.com (accessed on January 15, 2010)
- Photos:
 - Buses (Phil Coale)
 - Aftermath (Steve Martin, www.photosfromkatrina.com)