IAIA21

VIRTUAL EVENT

#iaia21

VISUAL TOOLS IN TODAY'S EIA PUBLIC PARTICIPATION

Ana Roque de Oliveira & Maria Partidário

CEG - IST

Portugal

anaroliveira@tecnico.ulisboa.pt

IAIA21 VIRTUAL EVENT

CEG · IST CENTRO DE ESTUDOS DE GESTÃO DO INSTITUTO SUPERIOR TÉCNICO | TÉCNICO LISBOA

Visual Tools in public participation:
Why? How to design? Who to involve?

VISUAL TOOLS IN TODAY'S EIA PUBLIC PARTICIPATION

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Calgary, Canada

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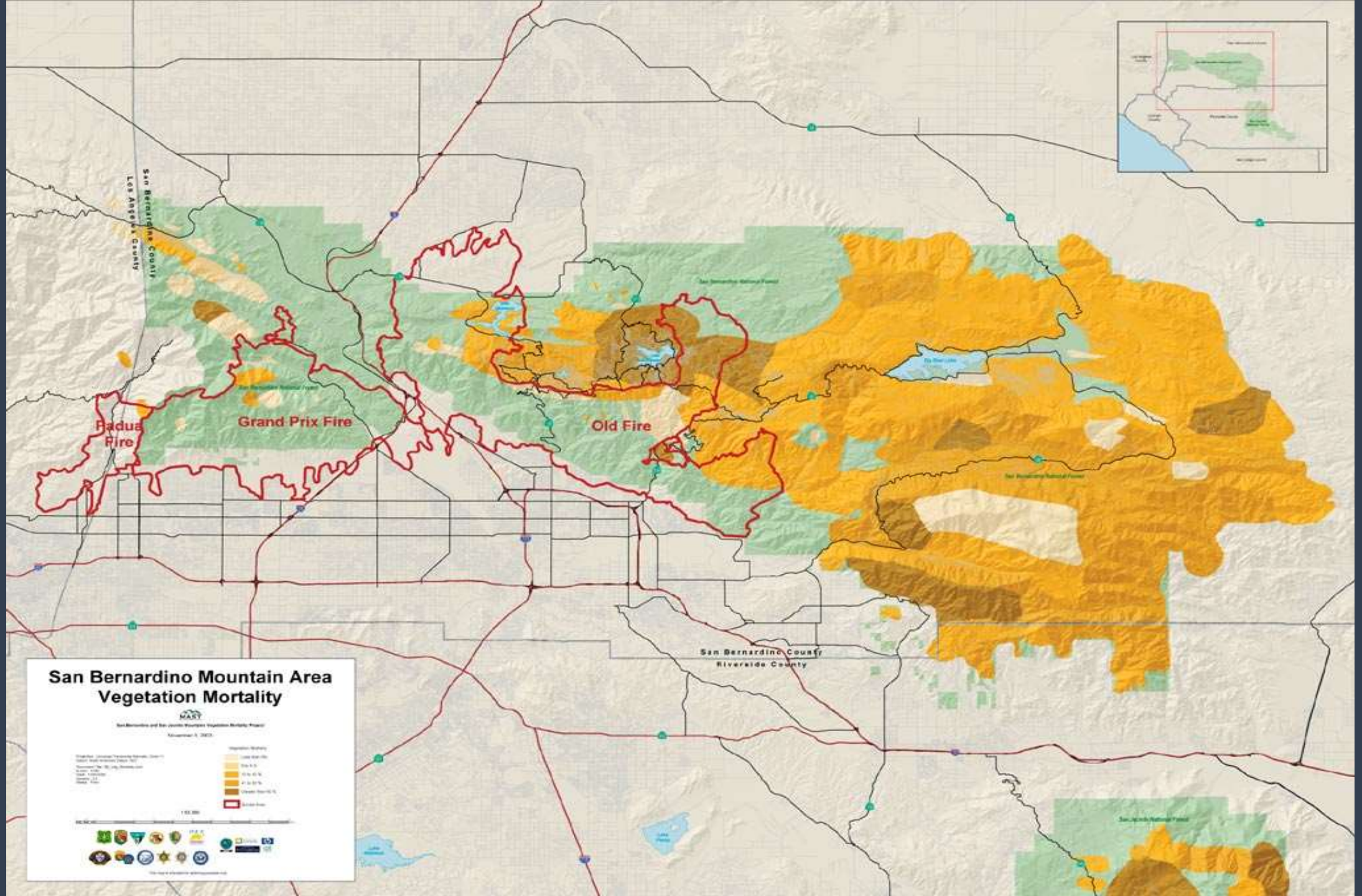
©City of Raleigh Urban Design Center


San Bernardino County
Los Angeles County
Grand Prix Fire
Old Fire
Radua Fire
San Bernardino County
Riverside County
San Bernardino Mountain Area
Vegetation Mortality

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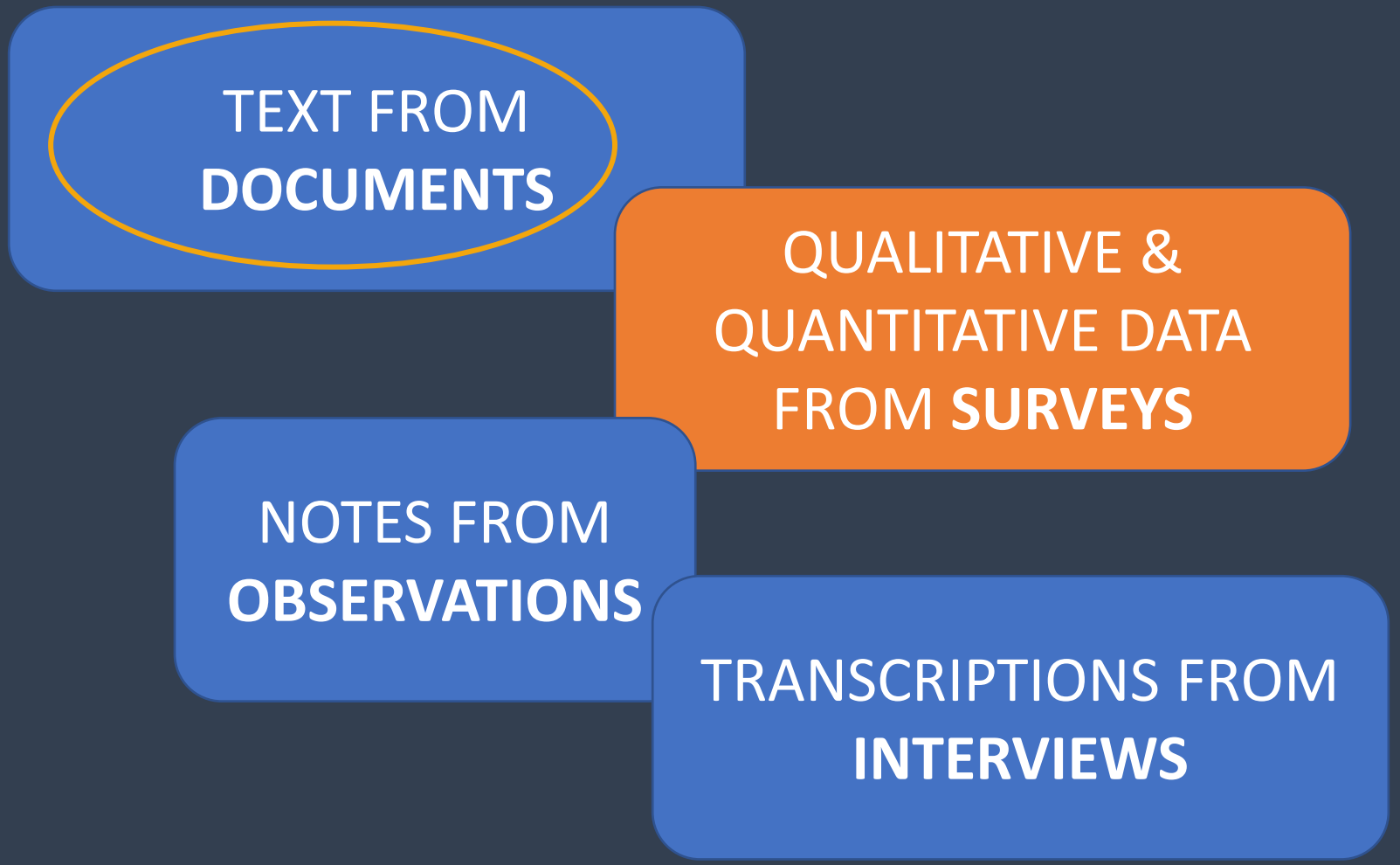
VPA Rhine River Branches by www.visualproblemappraisal.org

(ongoing) PhD research – data analysis



Reporting on the use of visual tools

environmental academia
literature review & studies

environmental consultants
direct work with stakeholders

PPGIS

more basic, low technology tools

Environmental Impact Assessment Review 83 (2020) 106413

Contents lists available at ScienceDirect

Environmental Impact Assessment Review

journal homepage: www.elsevier.com/locate/eiar

You see what I mean? – A review of visual tools for inclusive public participation in EIA decision-making processes

Ana Roque de Oliveira*, Maria Partidário

CEG-IST, Instituto Superior Técnico, Universidade de Lisboa, Portugal

González et al. (**2008**)

International Association for Impact Assessment

Survey: public participation practice and emerging information technology (**IT**) and Geographic Information System (**GIS**)-based approaches with regard to public involvement **in environmental planning**

SURVEY

ARCTIC EIA

ARCTIC COUNCIL

Sustainable Development Working Group

Nordic Council of Ministers

IAIA Connect

Rovaniemi, Finland
December 2017

January-March 2018

Exploratory Survey- Use of Visual tools in Public Participation (PP)

PhD Research by Ana Roque de Oliveira (IST – University of Lisbon, Portugal)

WHAT YOU'VE DONE

PLEASE CONSIDER **YOUR MOST RECENT (last 2 years)** PP EXPERIENCE in the context of an Environmental Impact Assessment (EIA) or in any other decision-making process

1 – What is/was your role? (check all that apply)

Project promoter ◯ Administration/Government ◯ Public/NGO/other interested or affected party ◯

2 – Which visual tools were used by the proponent in the **project presentation**? (check all that apply)

Maps ◯ Diagrams ◯ Photographs ◯ Drawings ◯ Paintings ◯ Graphs ◯

Videos ◯ Scale Models ◯ Other (please specify) ◯ _____

_____

3 – Indicate which visual tools were used by the public/NGO/other interested/affected parties to **present comments and participate in the public debate** (check all that apply)

Maps ◯ Diagrams ◯ Photographs ◯ Drawings ◯ Paintings ◯ Graphs ◯

Videos ◯ Scale Models ◯ Other (please specify) ◯ _____

_____

PLEASE CONSIDER **YOUR OVERALL** PP EXPERIENCE. **If you think visual tools are relevant,**

4 – Do you see any **advantage(s)** of the use of visual tools? (If yes, please specify)

- _____

Videos ◯ Scale Models ◯ Other (please specify) ◯ _____

_____

WHAT YOU THINK

PLEASE CONSIDER **YOUR OVERALL** PP EXPERIENCE. **If you think visual tools are relevant,**

4 – Do you see any **advantage(s)** of the use of visual tools? (If yes, please specify)

- _____
- _____

5 – Do you see any **disadvantage(s)** of the use of visual tools? (If yes, please specify)

- _____
- _____

6 – How can one **improve** the way visual tools (VT) are used in PP? (check all that apply)

Keep VT simple (do not include excessive information) ◯ Use adequate scales (e.g., in maps, graphs) ◯

Combine VT with explanatory text (so that VT are less ambiguous) ◯ Use VT that respect the public's culture ◯

Use VT that consider the public's literacy level ◯ Use interactive VT (e.g., participatory mapping) ◯

Other (please specify)_____

_____

7 – Did you publish/do you know a relevant reference on the use of visual tools in PP? (If yes, please indicate full reference) _____

_____

Thank you for your cooperation!

Please return this survey to Ana Roque de Oliveira during the workshop *Tomorrow's Arctic EIA*, or via email:

anaroliveira@tecnico.ulisboa.pt

Exploratory Survey- Use of Visual tools in Public Participation (PP)

PhD Research by Ana Roque de Oliveira (IST – University of Lisbon, Portugal)

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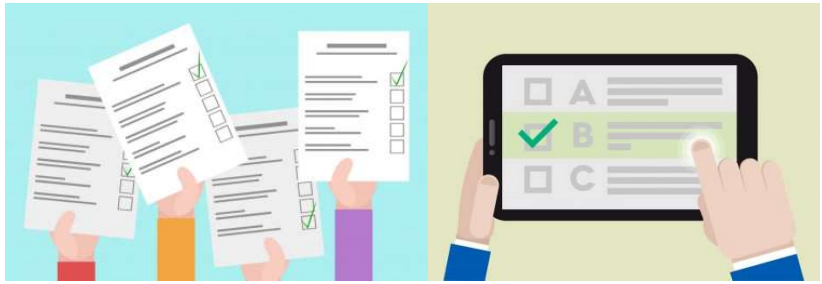
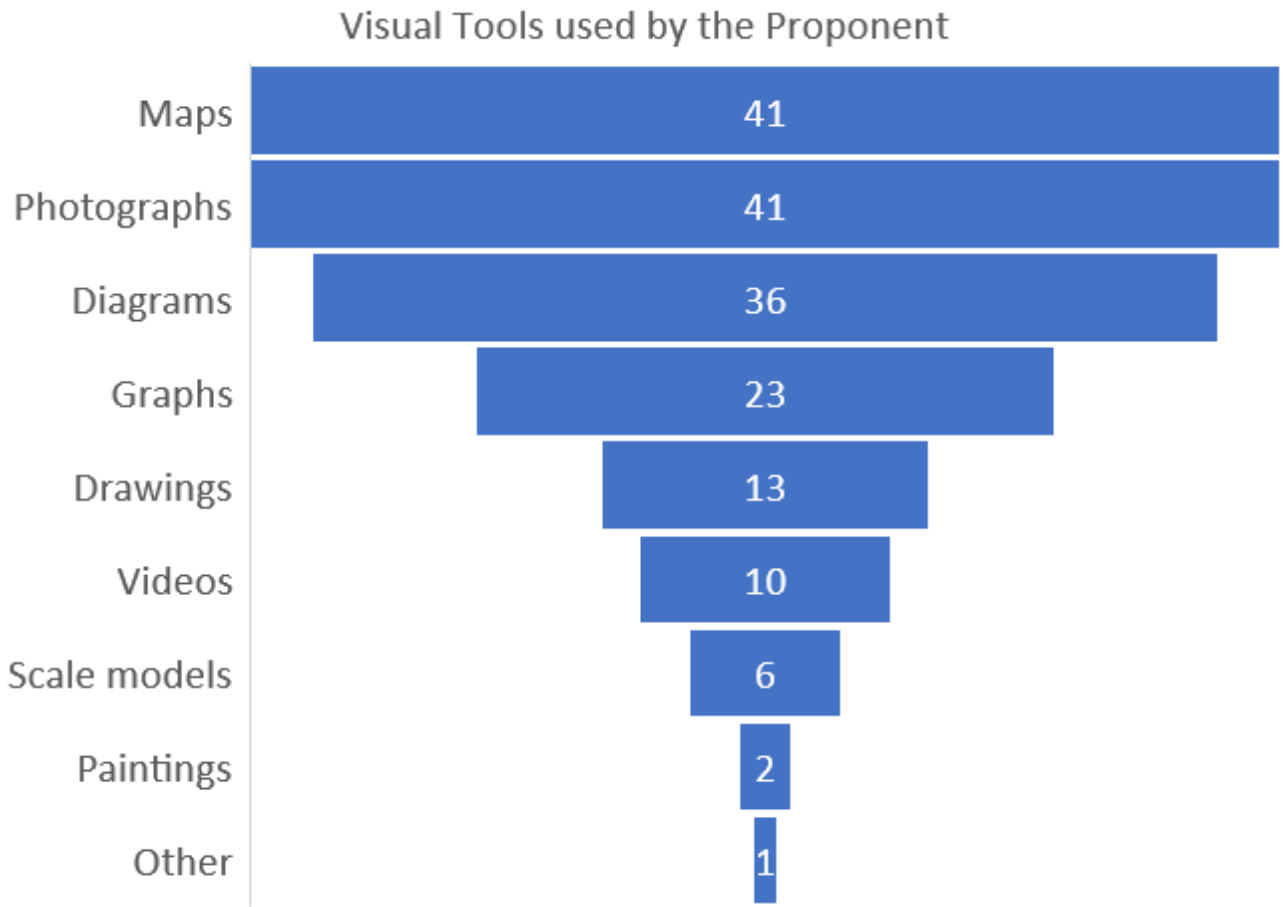
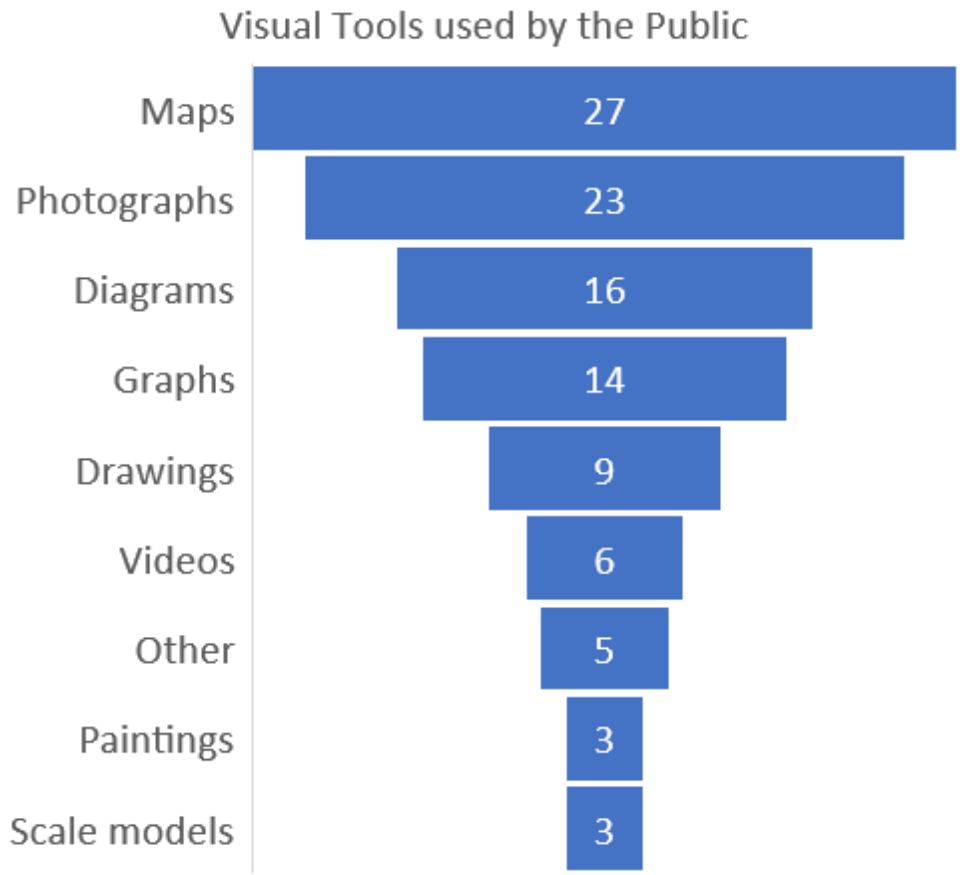
70% responses (n=42)

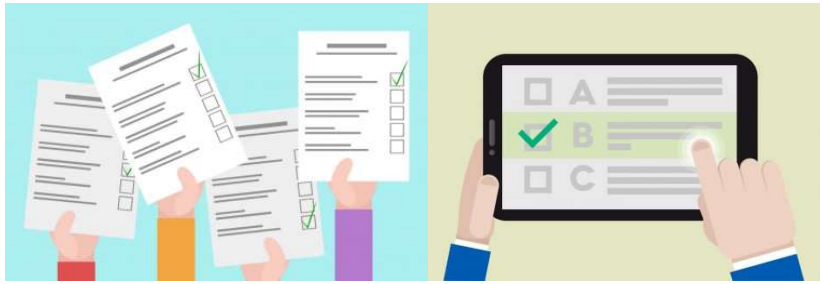
4% responses (n=9)



A
B
C


Visual Tools used by the Proponent
Maps 41
Photographs 41
Diagrams 36
Graphs 23
Drawings 13
Videos 10
Scale models 6
Paintings 2
Other 1


Visual Tools used by the Public
Maps 27
Photographs 23
Diagrams 16
Graphs 14
Drawings 9
Videos 6
Other 5
Paintings 3
Scale models 3



A
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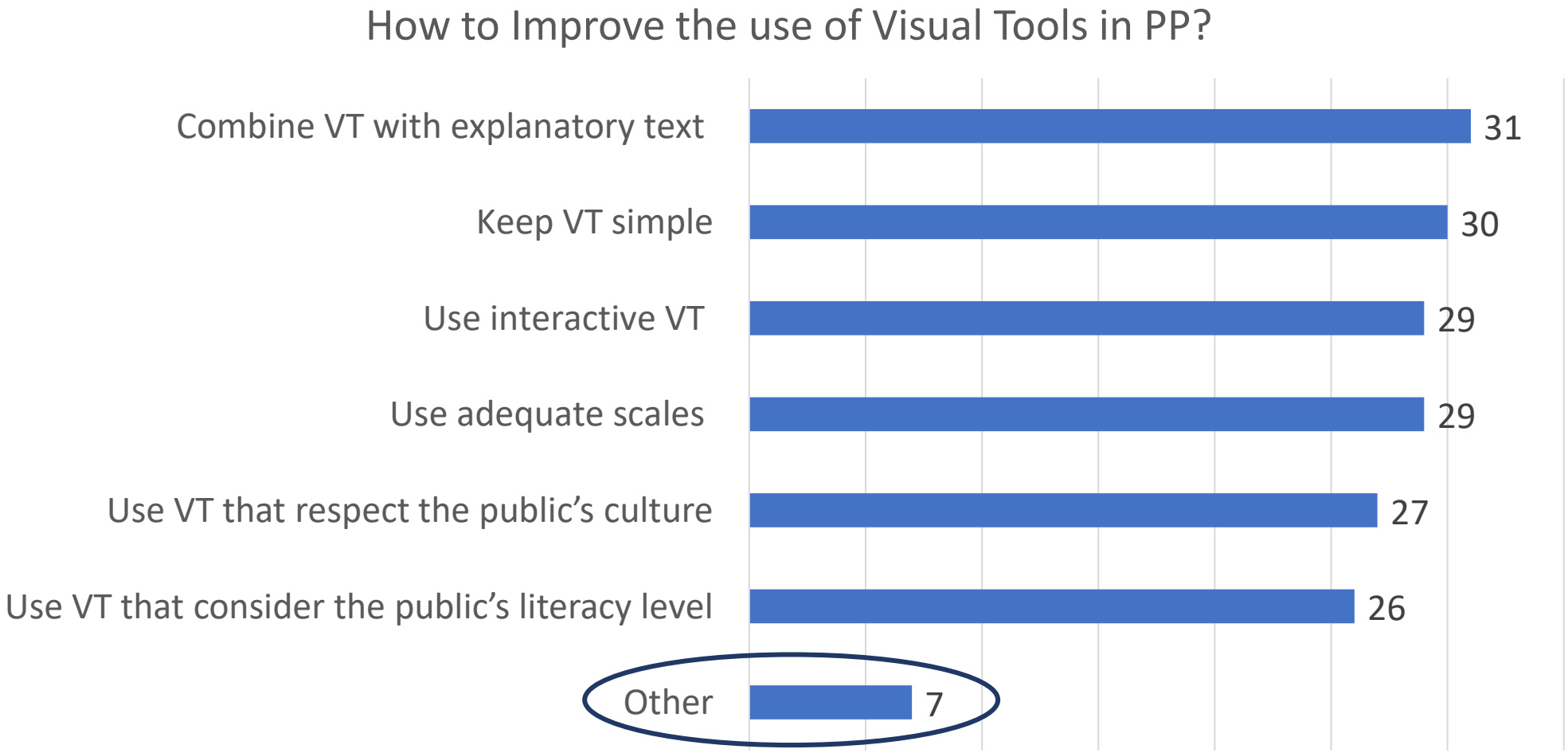
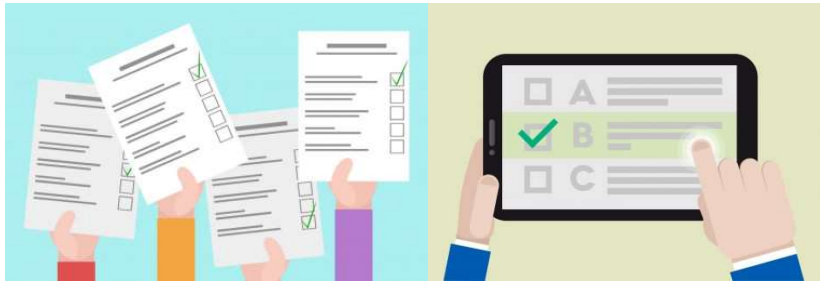

How to Improve the use of Visual Tools in PP?
Combine VT with explanatory text
31
Keep VT simple
30
Use interactive VT
29
Use adequate scales
29
Use VT that respect the public's culture
27
Use VT that consider the public's literacy level
26
Other
7



IMPROVEMENTS TO VISUAL TOOLS

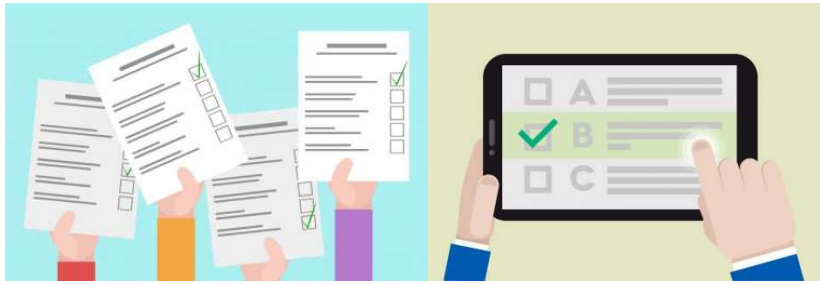
OTHER

*Use **color maps** that are visible to **color blind** people*
*Use only **relevant maps, graphs** (avoid confusion and manipulation)*

*Consider **what is important to the audience**, e.g., for Inuit, need to see key areas, so photos are most helpful*

***Show to reference groups** before event* (check audience's perceptions)

*Acknowledge **complexity of systems***
*Many participants will want **more information** - they do not want things "dumbed down".*



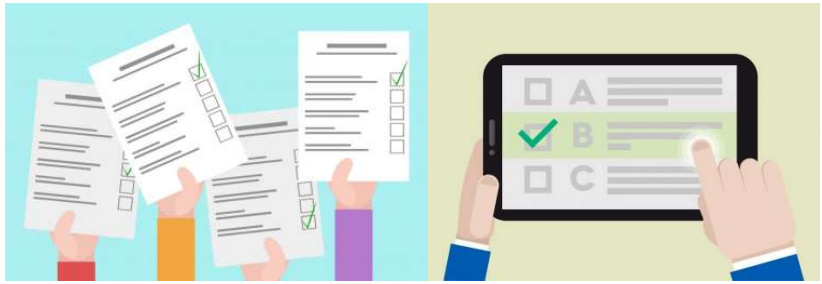
BENEFITS (+) AND CHALLENGES (-) OF VISUAL TOOLS

COGNITIVE ISSUES

+ / −

CULTURAL/SOCIAL ISSUES

EMOTIONAL ISSUES

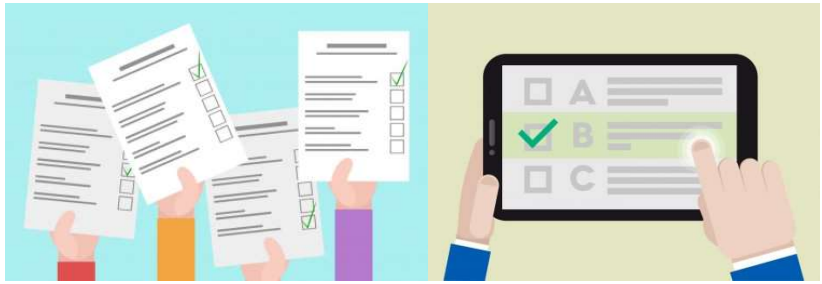


COGNITIVE ISSUES

Efficiency of communication +

Understanding context & projects +

Data **manipulation**, propaganda −



CULTURAL/ SOCIAL ISSUES

Familiarity with visual tools

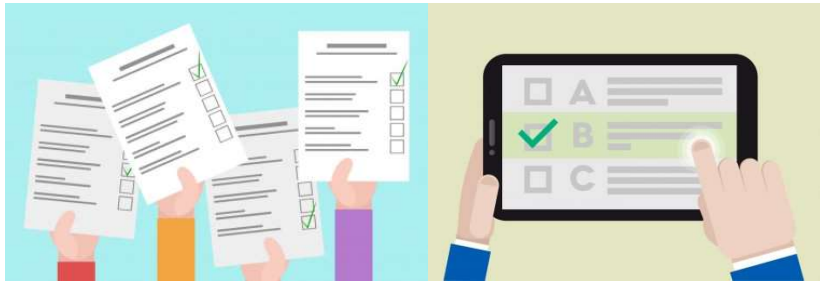
*Maps, photos and videos are **familiar** to indigenous peoples in my region*

Lack of cultural **concepts**, values

*Visual tools need to have **cultural translation***

Framing effect

*Visual tools need to be **explained** not to confuse the public*



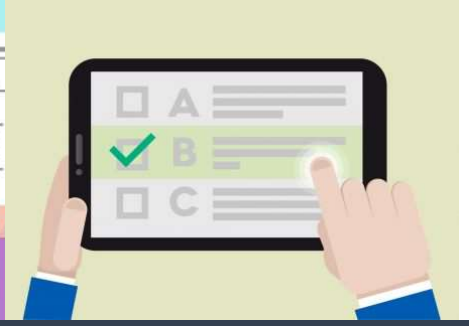
EMOTIONAL ISSUES

Emotions can be ***awakened*** +

*Critical thinking may be **clouded** by emotions* −

*Get the message across in a more **powerful** way* +

*Visual tools draw people's **attention*** +



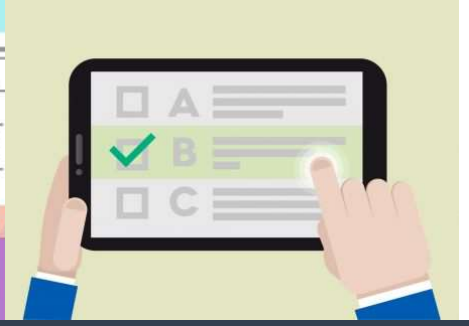
CONCLUSIONS

1 **Visual Tools may promote inclusive public participation**

Key concepts: Perception / Integration / Emotions & Decision-Making

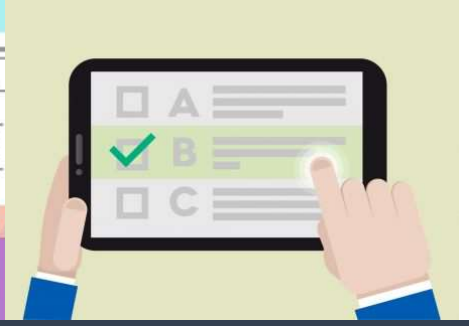
2 **Visual Tools should be adequate to the stakeholders**

Key concepts: Technical, Cognitive, Social/Cultural, Emotional issues



RECOMMENDATIONS

1 Move away from the “**one size fits all**” approach



RECOMMENDATIONS

1 Move away from the “**one size fits all**” approach

2 Allow for stakeholders’ active participation in the **choice and design** of the Visual Tool

Visual tools are good if the audience chooses them

See upcoming article!

SPEAK LOUDLY
SPEAK VISUALLY

anaroliveira@tecnico.ulisboa.pt

Let's continue the conversation!

Post questions and comments via chat in the IAIA21 platform.

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Ana Roque de Oliveira

CEG-IST

Portugal

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