

## Tool 12: Linkage analysis tool

<b>Phase</b>	Phase 3: How are we going to get there? Strategy formulation
<b>Sub-phase</b>	Sub-phase 3.1: Develop strategic options and prioritisation
<b>Name of tool</b>	<b>Linkage Analysis</b>
<b>Objectives</b>	<p>Linkage analysis is used to explore the connections between objectives and potential activities and between the activities themselves.</p> <p>The objectives of linkage analysis are:</p> <ul style="list-style-type: none"> <li>▪ To identify where potential activities have strong positive relationships to objectives and other activities (can create a synergy), or</li> <li>▪ Have strong negative relations (can create a conflict) between objectives and other activities.</li> </ul> <p>This allows the team to see which activities should be connected in location and/ or timing.</p>
<b>Time required</b>	<p>This can be carried out in 2-3 hours, depending on the complexity.</p> <p><i>Note: For time spent on each sub-phase, please see section on Description of tool</i></p>
<b>Under which circumstances to use the tool</b>	<p>Use tool to:</p> <ul style="list-style-type: none"> <li>✓ To explore the connections between potential activities already proposed or developed during brainstorming</li> <li>✓ To ensure the developing strategy keeps focussed on objectives</li> </ul>
<b>Main actor(s) responsible</b>	<p>The planning team will be responsible to organise, if possible using a neutral moderator. It is good to work on this with participation of the same people involved in other major steps of the process i.e. technical departments, infrastructure organizations, residents’ representatives – according the nature of the potential activities.</p>
<b>Target / beneficiary</b>	<p>The team involved in developing the alternative strategies.</p>
<b>Description of tool</b>	<ul style="list-style-type: none"> <li>▪ The tool is used together with the mapping of potential activities. This allows location based linkages to be seen.</li> <li>▪ The preparation of the linkage analysis has the following steps: <ul style="list-style-type: none"> <li>▪ <u>Step 1.</u> Locate any of the potential activities identified on a map that covers the city at scale sufficient to be able to locate sites but still cover the whole city.</li> <li>▪ <u>Step 2.</u> Using the table below as a guide make a wall chart.</li> </ul> </li> <li>▪ List the main activities that have been identified down the left hand side (row headers), and along the top (column headers).</li> <li>▪ List the main objectives of the strategic plan – but only on</li> </ul>

	<p>the left hand side</p> <ul style="list-style-type: none"> <li>▪ Blank out the connection boxes where the same items connect</li> </ul> <p><u>Step 3.</u> For each pair of connections in each box mark the relationship as follows:</p> <ul style="list-style-type: none"> <li>▪ Positive relationship: where one project helps another (is compatible with) or supports the other: strong: ++, slightly: +</li> <li>▪ Negative relationship: where one project interferes (is not compatible) with the other: strong: --, low: -.</li> <li>▪ Neutral relationship: mark with 0</li> </ul> <p><u>Step 4.</u> For each pair where there is a strong relationship write a short note (table 2) indicating how benefits could be obtained or problems minimized. Examples could include integrated spatial planning, coordination of organization, link with taxation, coordinated timing.</p> <p><u>Step 5.</u> Rate each of the activities against the objectives. The result is identified groupings of activities which will help with the formulation of alternative strategies</p>
<p><b>Advantages and disadvantages of this tool</b></p>	<p>Advantages (+)</p> <ul style="list-style-type: none"> <li>+ Introduces the spatial dimension</li> <li>+ Helps the team explore potential synergies</li> <li>+ Helps avoid conflicting activities</li> <li>+ Keeps a focus on objectives</li> <li>+ Relatively quick- takes half a day</li> </ul> <p>Disadvantages (—)</p> <ul style="list-style-type: none"> <li>— An additional step, but one normally worth while</li> </ul>
<p>Related tools</p>	<p>Linkage analysis has a strong relationship with GAM, but is carried out as part of developing strategies rather than testing and comparing strategies.</p>
<p>References and further resources</p>	<p>This material was developed originally by IHS and DPU. It is included in the draft guidelines for sustainable urban development prepared for the European Commission</p> <p><u>Generally accessible documents:</u></p> <p>European Commission (2002) <a href="#">Towards sustainable urban development : a strategic approach, (Consultative guidelines for urban development co-operation)</a>, Brussels, European Commission.</p>