# New Best-So-Far Solutions for Taillard's benchmark (Capacitated VRP) 

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Table 1
New best solution for instance ta-n76-k10b.

| Number of routes |  | 10 |
| :---: | :---: | :---: |
| Total solution distance |  | 1344.6186241386285 |
| Route 1 | Capacity | 1654 |
|  | Distance | 258.5993825897365 |
|  | Visited customers | $73,9,11,68,54,55,60,57,56,59,61,58,67,69,35$ |
| Route 2 | Capacity | 1659 |
|  | Distance | 174.46520984752948 |
|  | Visited customers | $39,22,15,17,31,46,45,13$ |
| Route 3 | Capacity | 1590 |
|  | Distance | 72.761072402546 |
|  | Visited customers | 12, 42, 49, 47 |
| Route 4 | Capacity | 1594 |
|  | Distance | 321.3083147478987 |
|  | Visited customers | $7,72,62,65,66,63,64,52$ |
| Route 5 | Capacity | 1219 |
|  | Distance | 13.508270432752166 |
|  | Visited customers | 6, 10, 0 |
| Route 6 | Capacity | 1677 |
|  | Distance | 214.36282712025178 |
|  | Visited customers | $25,33,23,16,30,27,34,24,28,19,26,20,21,29,32$ |
| Route 7 | Capacity | 1617 |
|  | Distance | 90.52827230772104 |
|  | Visited customers | 50, 38, 41, 53, 48, 36, 43, 5 |
| Route 8 | Capacity | 1547 |
|  | Distance | 32.385178886685395 |
|  | Visited customers | 1, 4, 74, 71, 14,8 |
| Route 9 | Capacity | 687 |
|  | Distance | 6.0 |
|  | Visited customers | 3 |
| Route$10$ | Capacity | 1662 |
|  | Distance | 160.7000958035075 |
|  | Visited customers | $2,51,37,18,44,40,70$ |

Table 2
New best solution for instance ta-n101-k11b.

| Number of routes |  | 11 |
| :---: | :---: | :---: |
| Total solution distance |  | 1940.3568287958549 |
| Route 1 | Capacity | 1817 |
|  | Distance | 230.27850050984785 |
|  | Visited customers | $62,56,48,47,36,31,33,40,39,41,28,30,67,58,44,29,60$ |
| Route 2 | Capacity | 1820 |
|  | Distance | 222.6646274665028 |
|  | Visited customers | $16,4,3,5,10,1,2,9,8,6,0,7,21,27$ |
| Route 3 | Capacity | 1748 |
|  | Distance | 222.2551780101707 |
|  | Visited customers | 17, 96, 91, 88, 94, 98, 95, 89, 93 |
| Route 4 | Capacity | 1823 |
|  | Distance | 162.17838712371818 |
|  | Visited customers | $64,66,50,87,84,86,82,81,85,83,13,15$ |
| Route 5 | Capacity | 1823 |
|  | Distance | 189.47148208829344 |
|  | Visited customers | $53,49,32,46,37,42,34,38,78,79,51$ |
| Route 6 | Capacity | 1822 |
|  | Distance | 191.66845817249603 |
|  | Visited customers | $52,55,80,76,77,69,71,72,70$ |
| Route 7 | Capacity | 1834 |
|  | Distance | 128.3446877481935 |
|  | Visited customers | 12, 11, 97, 99, 26 |
| Route 8 | Capacity | 1783 |
|  | Distance | 140.99902299848813 |
|  | Visited customers | 20, 18, 92, 90, 23 |
| Route 9 | Capacity | 1830 |
|  | Distance | 160.87572347033327 |
|  | Visited customers | $65,68,59,35,45,54,43,63,57$ |
| Route$10$ | Capacity | 1775 |
|  | Distance | 199.20330215963585 |
|  | Visited customers | 22, 14, 73, 74, 75, 24 |
| Route$11$ | Capacity | 1428 |
|  | Distance | 92.41745904817546 |
|  | Visited customers | 19, 61, 25 |

