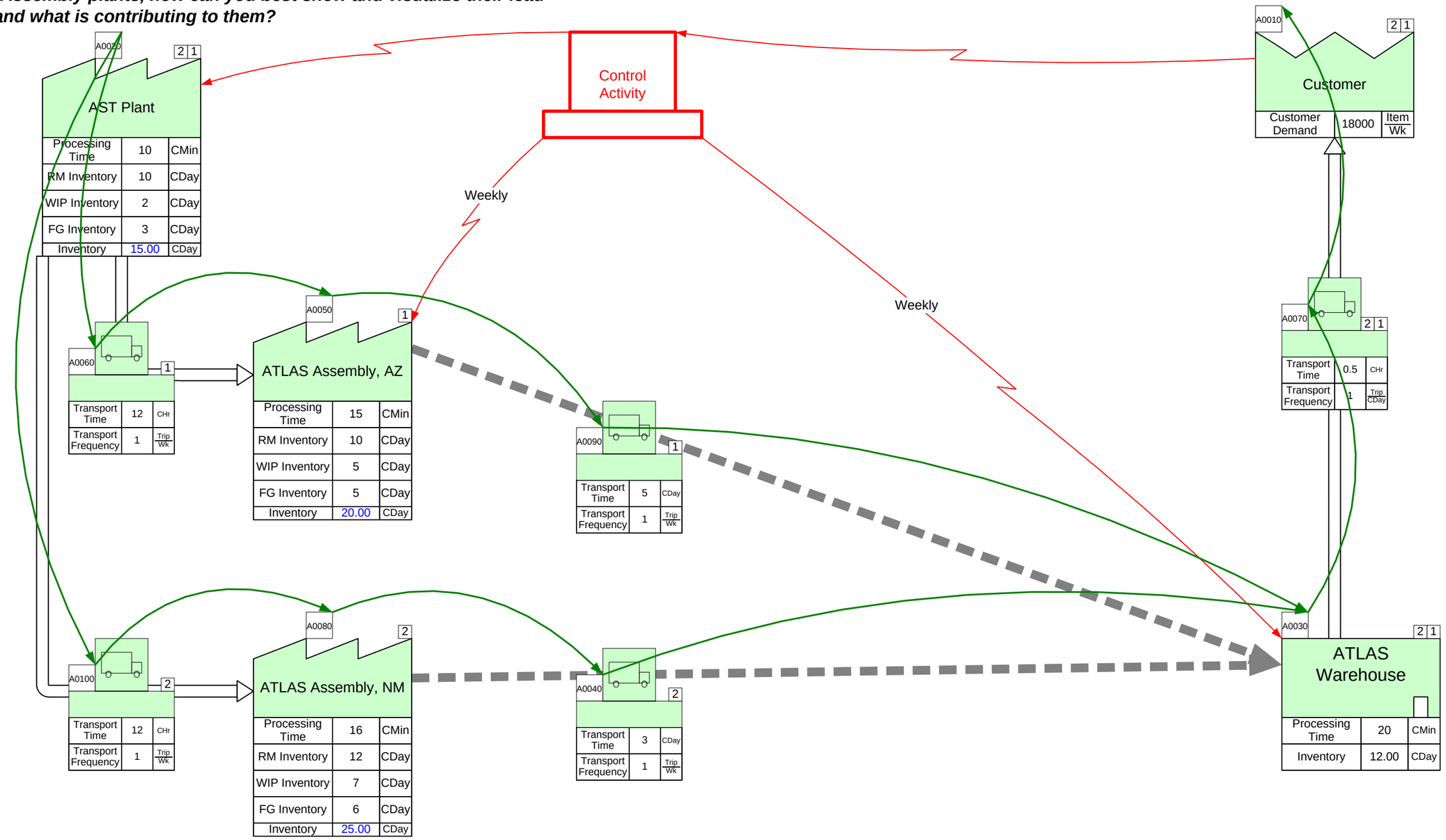
# Enterprise Problem: Lead Time

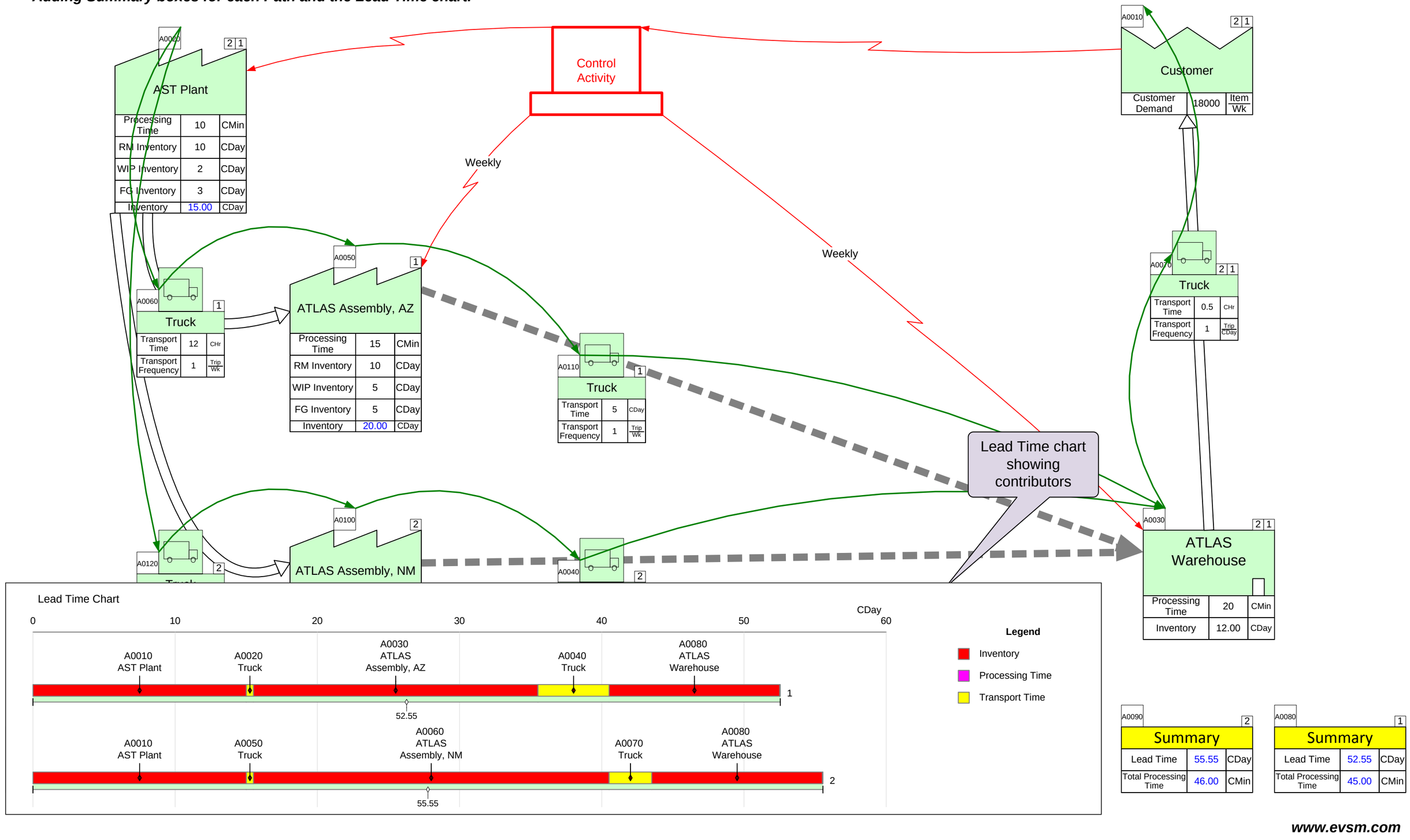
***With 2 Assembly plants, how can you best show and visualize their lead times and what is contributing to them?***




| CDay | ODay | Wk | Wk |
|---|---|---|---|
| 24 | 8 | 7 | 5 |
| CHr | OHr | CDay | ODay |

# Enterprise Solution: Lead Time

***Adding Summary boxes for each Path and the Lead Time chart.***

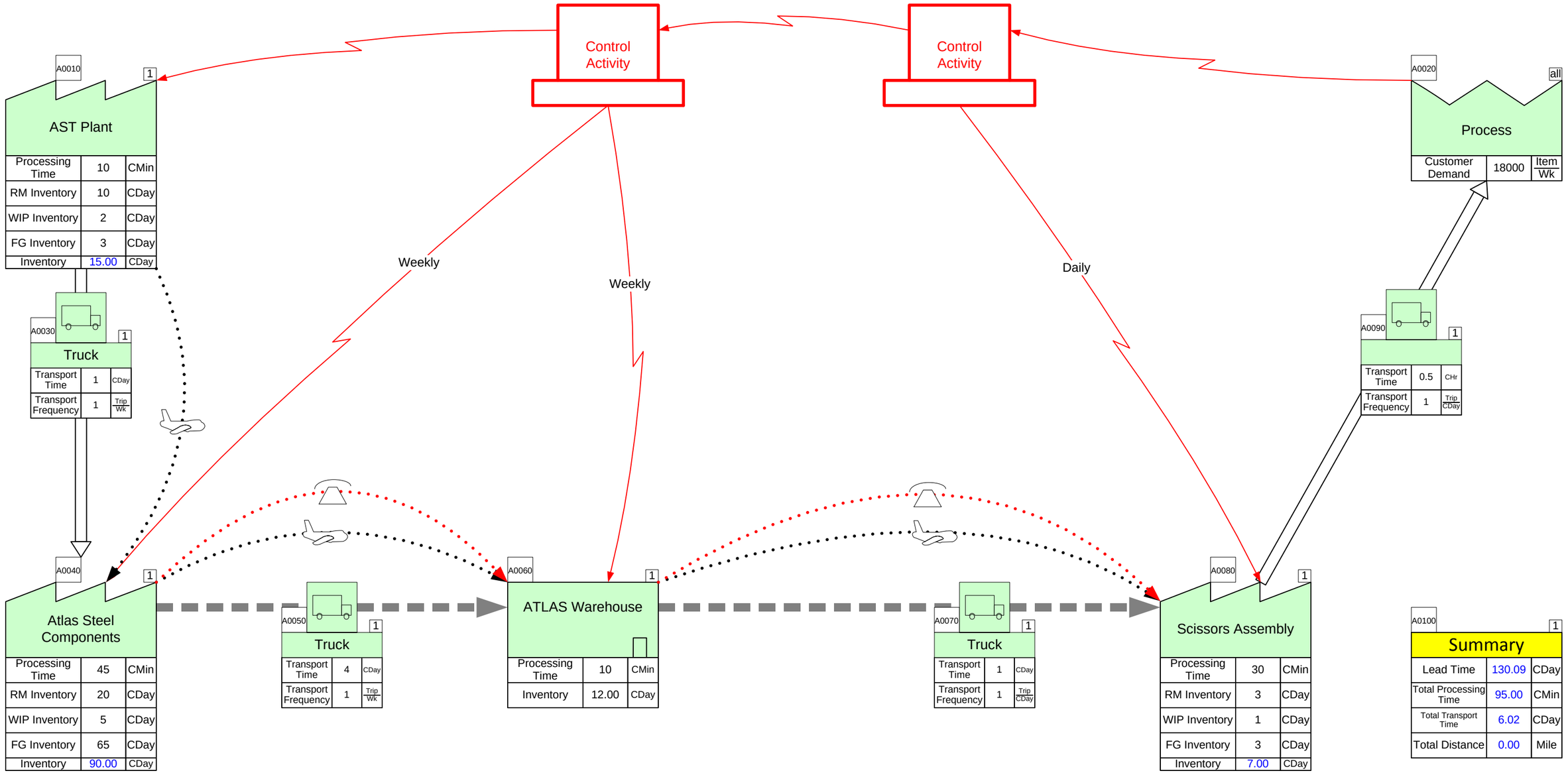



***www.evsm.com***

# Enterprise Problem: Carrying Costs

| CDay | ODay | Wk | Wk |
|---|---|---|---|
| 24 | 8 | 7 | 5 |
| CHr | OHr | CDay | ODay |

***Problem: You want to estimate the annual carrying cost of the inventory in the plant. You know that the Cost of Capital is 8%, Inventory Obsolescence is 1%, and Inventory Insurance is 1%.***

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# Enterprise Solution: Carrying Costs

***Use the inventory value add-ons for all the centers and the Carrying Cost Factors to calculate.***

| CDay | ODay | Wk | Wk |
|---|---|---|---|
| 24 | 8 | 7 | 5 |
| CHr | OHr | CDay | ODay |

Carry Cost Factors

Z0010 — all

**Inventory Carry Cost Factors**

| | | |
|---|---|---|
| Total Carrying Costs | 10 | % |
| Cost Of Capital | 8 | % |
| Inventory Damages | 0 | % |
| Insurance On Inventory | 1 | % |
| Inventory Obsolescence | 1 | % |
| Inventory Shrinkage | 0 | % |

A0010 — 1

**AST Plant**

| | | |
|---|---|---|
| Processing Time | 10 | CMin |
| RM Inventory | 10 | CDay |
| WIP Inventory | 2 | CDay |
| FG Inventory | 3 | CDay |
| Inventory | 15 | CDay |
| Added Conversion Cost | 2 | $/Item |
| Cumulative Cost | 2 | $/Item |
| Inventory Value | 77.14 | K$ |
| Annual Inv Carry Cost | 7.71 | K$ |

Annual Inventory Carry Cost

Control Activity

Control Activity

A0020 — all

**Process**

| | | |
|---|---|---|
| Customer Demand | 18000 | Item/Wk |
| Delivered Cost | 3.42 | $/Item |

Weekly

Weekly

Daily

A0030 — 1

**Truck**

| | | |
|---|---|---|
| Transport Time | 1 | CDay |
| Transport Frequency | 1 | Trip/Wk |
| Added Transport Cost | 0.4 | $/Item |
| Cumulative Cost | 2.4 | $/Item |
| Inventory Value | 6.17 | K$ |
| Annual Inv Carry Cost | 0.62 | K$ |

A0090 — 1

**Truck**

| | | |
|---|---|---|
| Transport Time | 0.5 | CHr |
| Transport Frequency | 1 | Trip/CDay |
| Added Transport Cost | .01 | $/Item |
| Cumulative Cost | 3.42 | $/Item |
| Inventory Value | 0.18 | K$ |
| Annual Inv Carry Cost | 0.02 | K$ |

A0040 — 1

**Atlas Steel Components**

| | | |
|---|---|---|
| Processing Time | 45 | CMin |
| RM Inventory | 20 | CDay |
| WIP Inventory | 5 | CDay |
| FG Inventory | 65 | CDay |
| Inventory | 90 | CDay |
| Added Conversion Cost | 0.61 | $/Item |
| Cumulative Cost | 3.01 | $/Item |
| Inventory Value | 696.6 | K$ |
| Annual Inv Carry Cost | 69.66 | K$ |

A0050 — 1

**Truck**

| | | |
|---|---|---|
| Transport Time | 4 | CDay |
| Transport Frequency | 1 | Trip/Wk |
| Added Transport Cost | 0.08 | $/Item |
| Cumulative Cost | 3.09 | $/Item |
| Inventory Value | 31.78 | K$ |
| Annual Inv Carry Cost | 3.18 | K$ |

A0060 — 1

**ATLAS Warehouse**

| | | |
|---|---|---|
| Processing Time | 10 | CMin |
| Inventory | 12 | CDay |
| Added Warehouse Cost | 0.07 | $/Item |
| Cumulative Cost | 3.16 | $/Item |
| Inventory Value | 97.51 | K$ |
| Annual Inv Carry Cost | 9.75 | K$ |

A0070 — 1

**Truck**

| | | |
|---|---|---|
| Transport Time | 1 | CDay |
| Transport Frequency | 1 | Trip/CDay |
| Added Transport Cost | 0.12 | $/Item |
| Cumulative Cost | 3.28 | $/Item |
| Inventory Value | 8.43 | K$ |
| Annual Inv Carry Cost | 0.84 | K$ |

A0080 — 1

**Scissors Assembly**

| | | |
|---|---|---|
| Processing Time | 30 | CMin |
| RM Inventory | 3 | CDay |
| WIP Inventory | 1 | CDay |
| FG Inventory | 3 | CDay |
| Inventory | 7 | CDay |
| Added Conversion Cost | 0.125 | $/Item |
| Cumulative Cost | 3.41 | $/Item |
| Inventory Value | 61.29 | K$ |
| Annual Inv Carry Cost | 6.13 | K$ |

Carry Cost Summary

A0100 — 1

**Summary**

| | | |
|---|---|---|
| Lead Time | 130.09 | CDay |
| Total Processing Time | 95 | CMin |
| Total Transport Time | 6.02 | CDay |
| Total Distance | 0 | Mile |
| Total Annual Inv Carry Cost | 97.91 | K$ |
| Inventory In Pipeline | 130.02 | CDay |
| Total Inventory Value | 979.11 | K$ |