The expertise and versatility of the Photogrammetry staff can help you achieve successful project delivery by providing:

- One Stop Shop for mapping products
- Planning assistance
- Data in a variety of formats to fit your needs
- Cost-Budget determination - no surprises
- Quality checked data
- On site assistance with our data
- Data Integration
- Existing data research and provision
- Updates or add-on to existing data
- Cost effective methodology
- Experienced staff & management
- Modern technology & software
- LIDAR acquisition and management

Benefits to Project Delivery

The best people, tools, methods, and products for your project are “in-house” and available to assist your WSDOT project delivery team!

WSDOT Geographic Services has Surveying, Remote Sensing, Photogrammetry and Aerial photography all “in-house” to help with your project. We have current technology and expertise in base mapping, structural modeling, aerial orthophotos, and control surveying to meet your project needs.

Benefits to the Transportation System

When you use our services, you also contribute to the agency’s enterprise database. We make sure your maps and images are compatible with other WSDOT data. We maintain the data for use by others for many purposes and for future use and reference.

Advanced Planning

Weather, the process itself, and geography still define our windows of opportunity for mapping flights and data collection. The sooner we are included in your project planning, the better we can get the data you need when you need it.

Contact Information & Websites

Scott Campbell  Photogrammetry Supervisor  360-596-8945

Photogrammetry WSDOT Internal Site  http://wwwi.wsdot.wa.gov/PPSC/Photogrammetry/Default.htm

Photogrammetry WSDOT Public Site  http://www.wsdot.wa.gov/Mapsdata/Photogrammetry/default.htm

Photogrammetry Electronic Order Form (Internal Only)  http://wwwi.wsdot.wa.gov/PPSC/Photogrammetry/OrderForm.htm
1. **3-D CAD** files for design base maps are made from large scale (low altitude) aerial photos and accurate ground control surveys.

2. The type of mapping described above can be enhanced by adding **orthophotos (corrected aerial photos)**. There is roughly a 5-10% additional cost to make the orthos once the 3-D CAD data and aerial photos are already done.

3. **Orthophotos** can also be created as “stand alone products” without the need to create design-quality CAD data. This requires less labor than is needed to collect the very detailed CAD data for design use, so the cost is a fraction of that to produce CAD mapping alone. However, the photos and survey used to make this special product cannot be used to go back and make precise CAD files for design work. One would have to start over with new photos and ground control for 3-D CAD files as described in number (1) above.

**3D Terrestrial Laser Scanning (3DTL)** This technology offers a new way to accurately survey areas that may be inaccessible using traditional survey or photogrammetric methods. We have a team of professionals that have already completed both large and small 3DTL projects. We have been working closely with WSDOT CAD and CAE coordinators to ensure the compatibility of 3DTL mapping products with WSDOT design software and procedures.

**3DTL technology is not a replacement for Survey and Photogrammetry but rather an additional tool to enhance the high accuracy mapping process.**

**PHOTOGRAPHY BASED MAPPING**

Photogrammetric Mapping uses pictures taken with special metric calibrated cameras (either film or digital) from airplane, helicopter or satellite. It works best if the pictures are taken on a clear day during the summer, but we have completed successful mapping jobs using pictures taken in midwinter.

**LASER SCANNER BASED MAPPING**

Laser scanning based mapping is comprised of:

- Ground Level or Terrestrial Laser Scanning (scanner on a tripod)
- Mobile Laser Scanning (scanner on ground vehicle)
- Airborne Laser Scanning (helicopter or fixed wing aircraft)

For more information contact John Tull, Photogrammetry Manager, 360-596-8940

Some of the benefits to LiDAR mapping:

- Greater safety for motorists and survey crews by working away from traffic
- Decreased traffic disruption by collecting data from a distance
- Reduce time collecting field data
- Expand data collection to difficult to reach areas like unstable slopes, tunnels, bridges, and structures